

产品手册

WAVE SPRING RETAINING RING 波形弹簧与挡圈

专注于工业制造配件 用心服务



COMPANY PROFILE

公司简介

敏硕科技是一家集研发、生产、销售于一体的**中外合资精密五金专业制造商**，主营精密弹簧、密封产品、制冷配件、单向阀等系列五金制品。

公司在**江苏、上海、浙江、美国、泰国**设有五大生产基地，并在天津设立分公司，拥有标准厂房两万余平方米。企业核心团队由创始人及资深技术骨干组成，具备欧美同行业先进管理经验与领先技术。

公司现有员工 398 人，其中专业技术与管理人员 168 人，各类生产及检测设备 1000 余台，构建了**研发—生产—销售—售后**一体化的现代化企业管理体系。企业已通过 IATF16949:2016 等权威质量体系认证，并拥有多项国家实用新型及发明专利。

Mascot Technology is a Sino foreign joint venture precision hardware professional manufacturer that integrates research and development, production, and sales. Its main products include precision springs, sealing products, refrigeration accessories, one-way valves, and other series of hardware products.

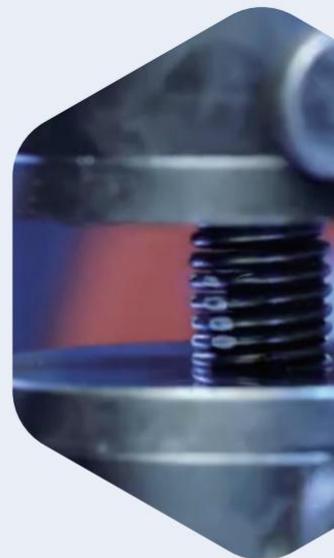
The company has five major production bases in Jiangsu, Shanghai, Zhejiang, the United States, and Thailand, and has established a branch in Tianjin with a standard factory area of over 20000 square meters. The core team of the enterprise is composed of founders and senior technical backbone, possessing advanced management experience and leading technology in the same industry in Europe and America.

The company currently has 398 employees, including 168 professional technical and management personnel, and over 1000 production and testing equipment. It has established a modern enterprise management system that integrates research and development, production, sales, and after-sales service. The company has obtained authoritative quality system certifications such as IATF16949:2016 and holds multiple national utility model and invention patents.

为什么 选择我们？

公司始终坚守客户第一、质量至上的经营理念，为全球客户提供一站式弹簧、密封、制冷五金产品解决方案，支持各类定制化需求。以专业、优质、安心、快捷、高效为服务准则，凭借诚信经营与过硬品质，赢得海内外客户广泛认可，业务网络遍布全球。

The company always adheres to the business philosophy of customer first and quality first, providing one-stop solutions for spring, sealing, and refrigeration hardware products to global customers, and supporting various customized needs. Adhering to the service principles of professionalism, quality, peace of mind, speed, and efficiency, and relying on honest management and excellent quality, we have won wide recognition from customers at home and abroad, and our business network covers the world.





客户第一

Customers are the most important

对于顾客提出的任何正当、合理的要求，敏硕都会想方设法、尽最大努力去满足



质量至上

Guaranteed quality

产品质量无疑是整个企业的基石,也是第一个要抓的重点



品牌创新

Brand Power

品牌力量是创新力量的体现,是公司经济力量和文化力量的集中展现



定制服务

Customized

根据每个客户的需求定制化的设计和生产产品,更好的满足客户的需求

WELCOME to MASCOT

≡ 弹簧事业部

✂ 五金制冷事业部

☑ 密封事业部

SPRING DIVISION

弹簧事业部

公司配备压拉扭弹簧机 160 台、CNC 弹簧机 60 台、精密检测设备 20 套，可高精度定制各类标准与非标准精密弹簧及五金件：

常规弹簧：压簧、拉簧、扭簧、螺旋弹簧、模具弹簧、卡簧、蛇形弹簧、异型弹簧、弹簧垫圈、孔用 / 轴用弹性挡圈、止动环等

特种弹簧：高温弹簧（耐温 600℃）、低温弹簧（耐温 - 260℃）、恒力弹簧、发条、涡卷弹簧、悬架弹簧、密封弹簧

碟形 / 波形弹簧：

碟形弹簧 外径 Φ 3-900mm，厚度 0.08-60mm

波形弹簧 外径 Φ 1-500mm，厚度 0.1-10mm

大线径弹簧：

冷卷弹簧 线径 Φ 0.2-20mm

热卷弹簧 线径 Φ 16-100mm

配套精密五金：

螺旋叶片弹簧、阻尼

器、气杆、缓冲器等

产品经严格疲劳测试，最高耐疲劳可达 1 亿次以上，性能稳定可靠。

常用材料：各类碳素钢、合金钢材料、琴钢线、Hastelov 哈氏合金、Elgilov、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。

Special springs: High temperature springs (temperature resistance of 600 °C), low-temperature springs (temperature resistance of -260 °C), constant force springs, mainsprings, spiral springs, suspension springs, seal-

Disc shaped/wave shaped spring:

Disc shaped spring with an outer diameter of Φ 3-900mm and a thickness of 0.08-60mm

Outer diameter of waveform spring: Φ 1-500mm, thickness: 0.1-10mm

Large diameter spring:

Cold coil spring wire diameter Φ 0.2-20mm

Hot coil spring wire diameter Φ 16-100mm

Supporting precision hardware: spiral blade springs, dampers, air rods, buffers, etc

The product has undergone rigorous fatigue testing, with a maximum fatigue resistance of over 100 million cycles and stable and reliable performance.

Common materials: various types of carbon steel, alloy steel materials, piano wire, Hastelov alloy Elgilov、SAE6150、SAE9254、50CrV4、60Si2CrA、62Si2MnA、SK4、SK5、CK55、CK67、CK70、CK75、65Mn、SUS301、SUS304、SUS316、SUS631、17-7、InconelX-718、InconelX-750、GH145 Wait.

Surface treatment: bluing, blackening, phosphating, electroplating, electrophoresis and spray painting, spray painting, Dacromet, Jiaomeite, etc.



搭口型-WO系列



缺口型-WG系列



对顶波簧-WM系列



平垫圈-WF系列



园线型-WR系列



线型-WL系列

What is **波形弹簧** **A WAVE SPRING?**

波形弹簧应用于电机、纺织机械、液压设备、汽车等行业。主要安装在轴承室或与规格(公称尺寸)相适应的孔内。安装空间很小，具有降低噪音和振动的特殊功能。

Wave spring is used in motor, textile machinery, hydraulic equipment, automobile and other industries. It is mainly installed in the bearing chamber or the hole corresponding to the specification (nominal size). The installation space is very small, with the special function of reducing noise and vibration.

APPLICATION OF WAVE SPRING

波簧应用

与其所起的作用相比，波簧占据的空间通常非常小。本产品可用于狭小的轴向和径向空间，但并不仅限于此。边缘卷绕波簧采用预回火的原材料，具有卷绕而成的顺滑圆形正弦波形，与模具冲压制成的产品相比具有许多优点。它的负荷与弹性比率的精度和可预测性更高，公差比冲压产品小 50%。在绝大部分的变形范围中，波形弹簧的弹力将以一致的比率增长。边缘卷绕波簧的金属加工方法、机械性质以及均匀的尺寸稳定性共同构成了一种适合高精度高品质应用的组件。



航空航天



精密机械



液压密封



高端电机



省空间

SAVE SPACE

波形弹簧具有节省空间的独特优势，可以用来代替圆线弹簧。通过降低弹簧工作高度，波簧也减少了弹簧腔的体积。它以较小的组件尺寸和较少的制造材料实现了成本的节约。

Wave Springs offer the unique advantage of space savings when used to replace coil springs. By reducing spring operating height, wave springs also produce a decrease in the spring cavity. With a smaller assembly size and less material used in the manufacturing process, a cost savings is realized.



高精度

HIGH ACCURACY

波簧属于负荷承载设备。它们占据间隙，并且补偿装置中的尺寸变化。通过逐渐累积或突然改变负荷使波簧达到预定工作高度，可以产生几乎任何一种范围的力度。如此便可建立负荷与变形程度成比例的精确弹性比率。

Wave springs operate as load bearing devices. They take up play and compensate for dimensional variations within assemblies. A virtually unlimited range of forces can be produced whereby loads build either gradually or abruptly to reach a predetermined working height. This establishes a precise spring rate in which load is proportional to deflection.



高品质

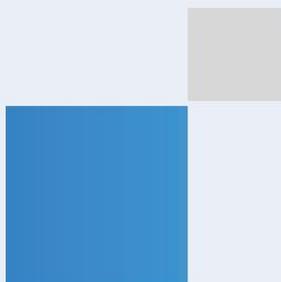
SUPERIOR QUALITY

No matter from what standard, the reliability and performance of wave spring are better than the general level. As the pre tempered all hard material is used, there is no risk of spring deformation caused by hardening heat treatment.

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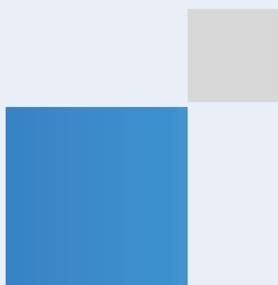
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Wave Spring Application Examples

波形弹簧的应用示例

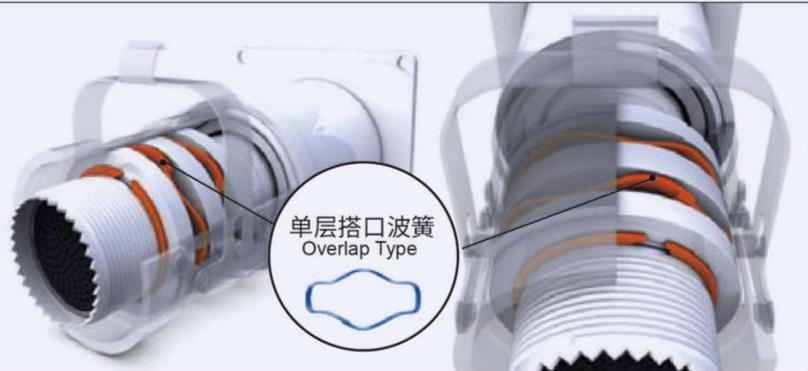
1

航天用电器接头

Aerospace electrical connector

该装置中的两个单层搭口波形弹簧在被压缩时会向接头施加恒力，提供持续链接的保障。

The two single-Turn,Overlap Type wave springs in the assembly exert a constant force on the connector when they are compressed providing the assurance of continuous connection .



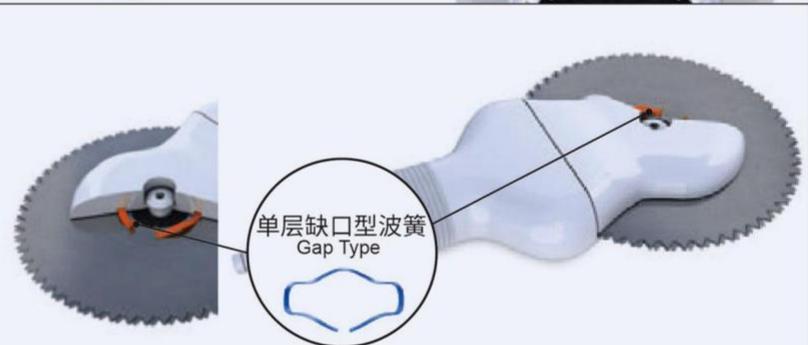
2

多齿切割工具

Multi tooth cutter

该切割工具使用特殊设计的波形弹簧，该弹簧在制造时带有定位梢。波形弹簧向切割工具的两个半部施加压力，将他们结合在一起，同时允许他们摆动。

The cutter uses a specially designed wave spring manufactured with locating tabs. The wave spring applies pressure to the two cutter halves ,holding them together,while allowing them to oscillate.



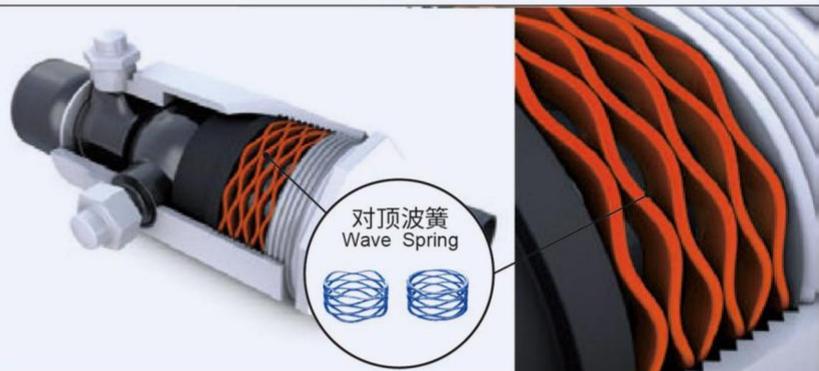
3

流量阀应用

Flow Valve Application

随着流体压力的增加，对顶波簧精确控制柱塞的线性位移，这会定位液孔以允许适当的流体流动。

As the fluid pressure increases the wave spring precisely controls the linear displacement of the piston,which positions the orifice for proper fluid flow.



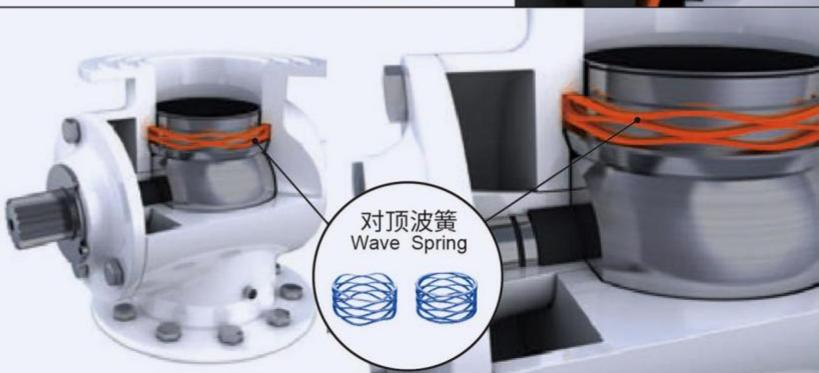
4

阀应用

Valve Application

当通过阀施加压缩空气时，对顶波簧会压缩以准确维持某种压力，此压力将精确地调节来自阀的流量。

When compressed air is forced through the valve, the wave spring compresses to accurately maintain a force that will precisely regulate the flow from the valve.



Wave Spring Application Examples

波形弹簧的应用示例

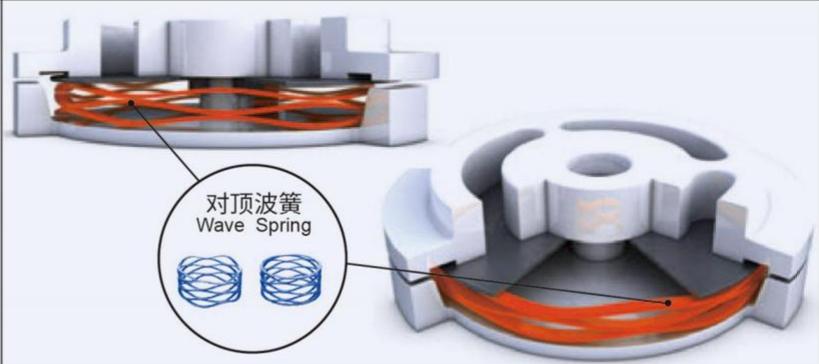
5

泄压阀应用

Pressure Relief Valve Application

使用对顶波簧实现确切的压力。此装置下的气压会造成弹簧负荷增大,迫使板远离密封表面,从而提供泄压机制。当施加给弹簧的负荷降低时,装置即可再次密封。

An exact pressure is accomplished using a wave spring. Air pressure under the assembly causes the spring load to increase, forcing the plate away from the sealing surface providing the pressure relief mechanism. When the load against the spring decreases, allowing the unit to seal once again.

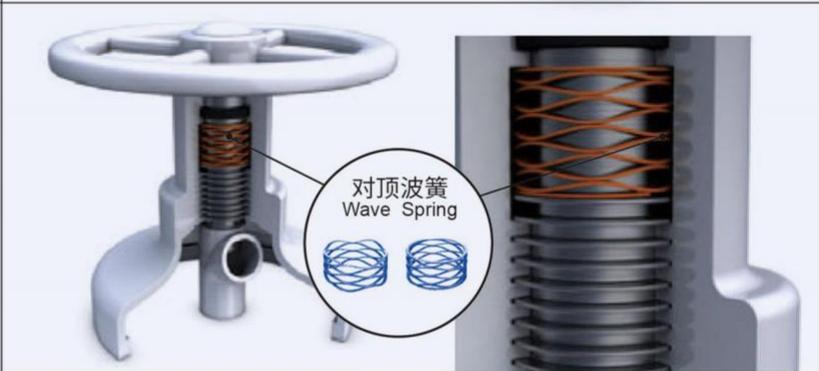

6

水阀应用

Water valve Application

使用对顶波簧可以维持恒定负荷并接合主轴上的螺纹,从而防止阀门手柄旋转。在手柄逆时针旋转时,波形弹簧的阻力会增大,降低继续旋转的可能性。

A wave spring also known as a flat wire compression spring, prevents the valve handle from rotating by maintaining a constant load and engaging the threads on the main shaft. As the handle rotates counter-clockwise, wave spring resistance increases and rotation is less likely.

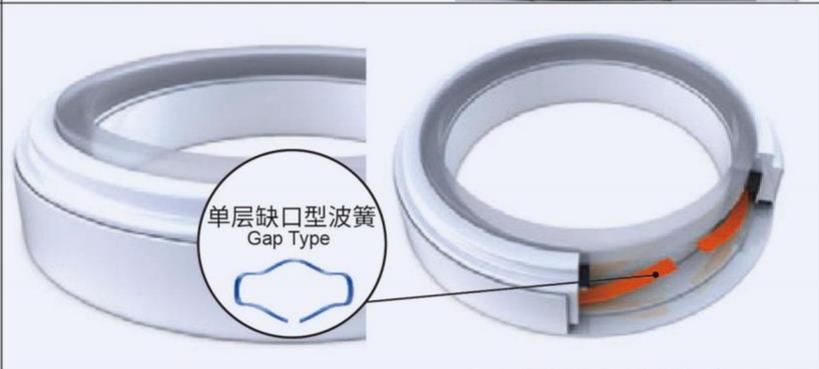

7

面密封应用

Face seal application

波形弹簧取代了不能维持必要弹性比率的冲压波形垫圈。必须从碳素钢表面向波形弹簧提供的密封表面施加确切的压力,以避免过度磨损,同时维持适当的密封性。

The wave spring applies pressure to precisely load the carbon face against a mating surface, properly sealing fluids. The wave spring operates over a fixed working range and provides an exact force. The wave spring replaces a stamped wavy washer that was unable to maintain the necessary spring rate. The exact pressure of the carbon face against the sealing surface provided by the wave spring is essential to avoid excessive wear, yet maintain a proper seal.

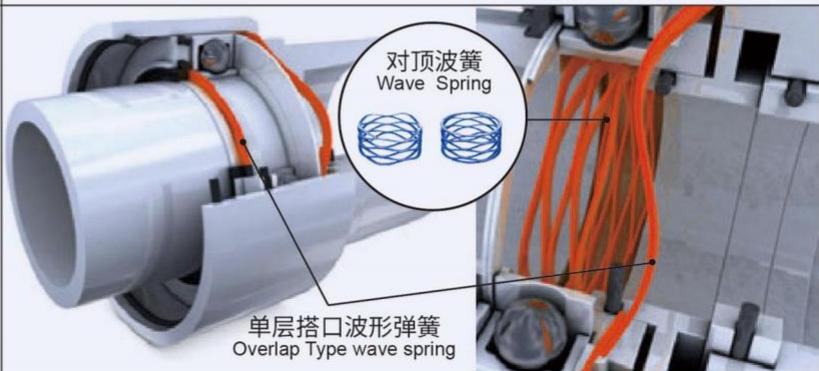

8

旋转装置应用

Rotary Union

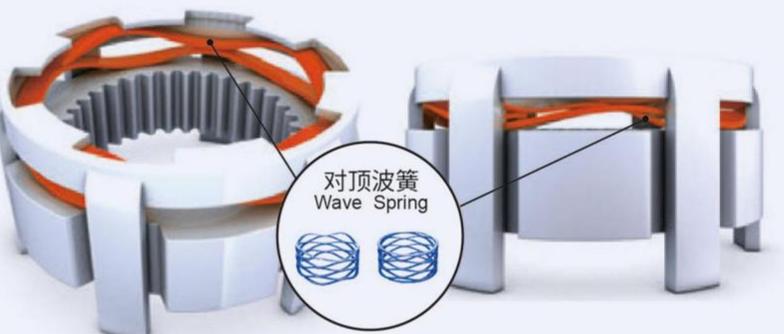
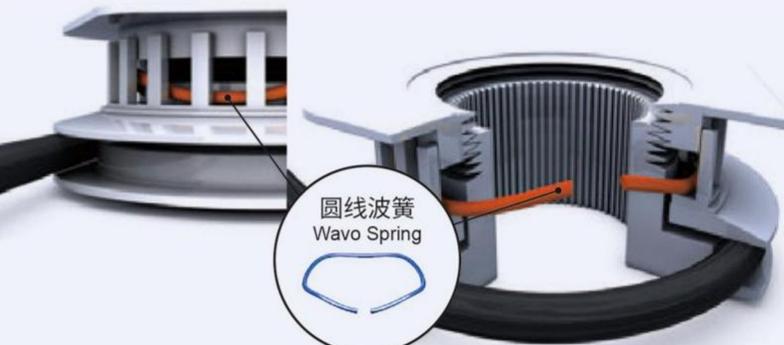
此应用结合使用单层波形弹簧和对顶波簧。波形弹簧的统一横截面使其可以安装在装置中且干扰配套组件。单层波形弹簧占据间隙并减少轴承预负荷能力中的振动。对顶波簧在压缩时产生的力有助于建立密封性,防止液体从装置的高压端流向低压端。

This application incorporates both a single-turn and a wave spring. The union cross section of the wave spring allows it to be installed in the assembly without interfering with mating components. The single turn wave spring takes up play and reduces vibration in a bearing preload capacity. The force of the wave spring, when compressed, helps create a seal to prevent fluid from flowing from the high pressure to the low pressure side of the union.



Wave Spring Application Examples

波形弹簧的应用示例

<p>9 防震器应用 Vibration Isolator Application</p> <p>在恒定负荷的条件下，防震器可抑制设备工作期间的振动。圆线弹簧用于提供精确且可预测的负荷/偏转曲线。 Under constant loading, the isolator dampens vibration from equipment operation. Wave springs are used to provide the precise and predictable load/deflection curves.</p>	 <p>圆线波簧 Wave Spring</p>
<p>10 浮动齿轮应用 Floating Gear Application</p> <p>对顶波簧具备包含支架的功能，它使用轻而准确的力对齿轮施加负荷，使其可以轴向移动。此应用中所示的齿轮在操作期间与其配套齿轮自动对齐。 Functioning in a contained bracket, a wave spring loads the gear with light, yet accurate force allowing axial movement. The gear shown in this application self-aligns with its mating gear during operation.</p>	 <p>对顶波簧 Wave Spring</p>
<p>11 离合器应用 Clutch Drive Application</p> <p>使用圆线波簧将轴承壳绑定到离合器的内部。该圆线波簧不会对装置产生凸耳干扰，并且拆卸槽口使操作员可以快速更换轴承。 Pressure on the round belt is produced by compressing the wave spring through the sheave halves. The top threaded cap rotates to adjust the wave compression.</p>	 <p>圆线波簧 Wave Spring</p>
<p>12 轴向柱塞泵 Axial Piston Pump</p> <p>圆线弹簧被指定用于向圆锥滚子轴承提供较高的预负荷。选择圆线弹簧是因为所需的力大于库存波形弹簧提供的力。 A wave spring was specified to provide a higher preload to the tapered roller bearings. The wave spring was chosen since the force needed was greater than offered with a stock wave spring.</p>	 <p>圆线波簧 Wave Spring</p>

What is 搭口型 A WAVE SPRING?

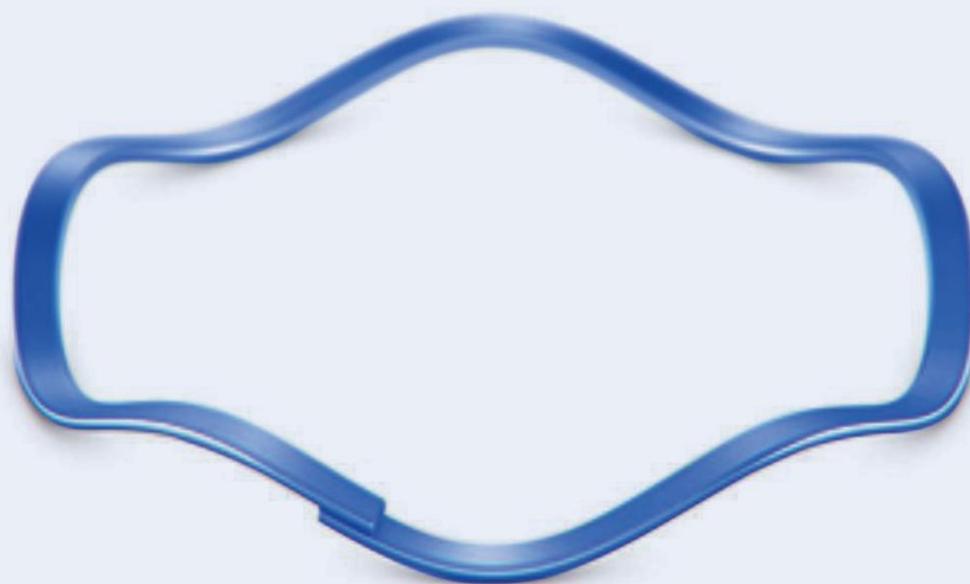
搭口型单层波形弹簧是扁线弹簧，其末端略微重叠。搭口型弹簧非常适合较小直径的应用，在无需考虑过度压缩问题的情况下可以减少包装缠绕。非常适合轻至中等负荷且变形较小的应用。

The lap type single-layer wavy spring is a flat wire spring with its ends slightly overlapped. Lap type springs are very suitable for applications with smaller diameters, and can reduce packaging entanglement without considering the problem of over compression. It is very suitable for applications with light to medium load and small deformation.



WO系列

搭口型 Overlap Type-WO Series



节省空间



较小变形



中等负荷



WO系列

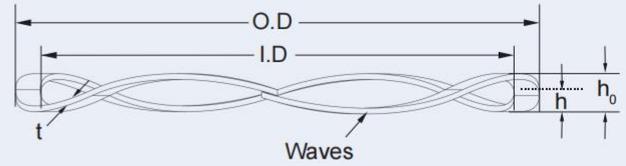
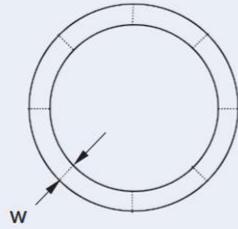
搭口型 Overlap Type-WO Series



WO - 0016

系列名称
Wave Springs Overlap Type

轴孔直径
(mm)



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WO-0016	9.00	6.86	25.8	3	1	1.50	1.00	0.20	0.81	52
WO-0019	10.00	7.49	27.6	3	1	1.57	1.00	0.20	1.02	48
WO-0022	11.00	8.46	29.4	3	1	1.83	1.00	0.20	1.02	35
WO-0022	12.00	9.17	33.4	3	1	1.57	1.00	0.25	1.17	59
WO-0024	13.00	9.53	37.8	3	1	1.57	1.00	0.25	1.47	66
WO-0016	16.00	11.28	44.5	3	1	2.29	1.57	0.25	1.98	65
WO-0019	19.00	14.28	53.4	3	1	3.05	1.57	0.25	1.98	35
WO-0022	22.00	16.46	62.3	3	1	2.79	1.57	0.30	2.39	48
WO-0024	24.00	18.46	66.7	3	1	3.56	1.57	0.30	2.39	35
WO-0026	26.00	18.22	71.2	3	1	2.54	1.98	0.41	3.38	111
WO-0028	28.00	20.22	75.6	3	1	2.79	1.98	0.41	3.38	85
WO-0030	30.00	22.22	84.5	3	1	3.30	1.98	0.41	3.38	66
WO-0032	32.00	24.22	89.0	3	1	3.81	1.98	0.41	3.38	52
WO-0035	35.00	27.22	97.9	3	1	4.57	1.98	0.41	3.38	38
WO-0037	37.00	28.72	102.3	3	1	3.81	1.98	0.46	3.63	58
WO-0040	40.00	31.72	111.2	3	1	5.08	1.98	0.46	3.63	37
WO-0042	42.00	33.72	115.7	4	1	3.05	1.98	0.46	3.63	99

PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制

Other materials such as 304 stainless steel and 72A can be customized

波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值



WO系列

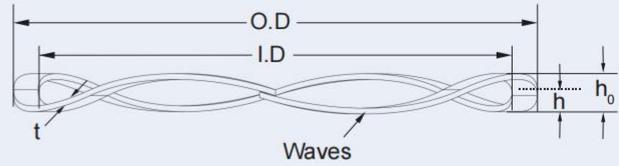
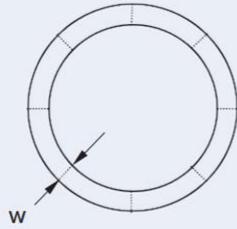
搭口型 Overlap Type-WO Series



WO - 0016

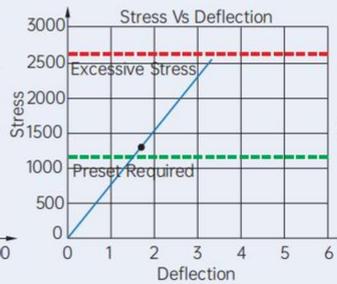
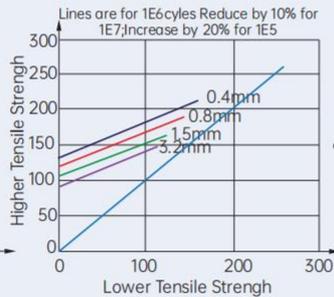
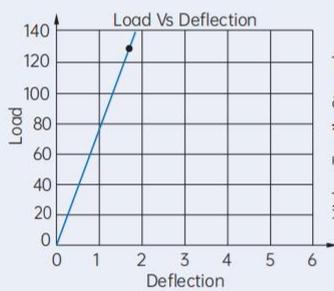
系列名称
Wave Springs Overlap Type

轴孔直径
(mm)



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WO-0047	47.00	38.72	129.0	4	1	3.81	1.98	0.46	3.63	68
WO-0052	52.00	43.11	142.4	4	1	3.56	2.36	0.61	3.76	121
WO-0055	55.00	46.11	151.3	4	1	3.81	2.36	0.61	3.76	100
WO-0062	62.00	51.69	169.1	4	1	4.32	2.36	0.61	4.52	85
WO-0068	68.00	57.17	186.9	4	1	4.32	2.77	0.76	4.78	131
WO-0070	70.00	59.17	191.3	4	1	4.32	2.77	0.76	4.78	119
WO-0072	72.00	61.17	195.8	4	1	4.57	2.77	0.76	4.78	108
WO-0075	75.00	64.17	204.7	4	1	5.08	2.77	0.76	4.78	94
WO-0080	80.00	68.66	218.0	4	1	5.59	2.77	0.76	4.78	76
WO-0085	85.00	71.38	231.4	4	1	5.59	2.77	0.76	5.92	83
WO-0090	90.00	76.38	249.2	4	1	6.35	2.77	0.76	5.92	68
WO-0095	95.00	81.38	262.5	4	1	7.37	2.77	0.76	5.92	57

WO-0047



PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制

Other materials such as 304 stainless steel and 72A can be customized

波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值

What is 缺口型 A WAVE SPRING?

缺口型单层波形弹簧是扁线弹簧，其末端有一个微小的间隙。缺口型波形弹簧非常适合导致高度或过度压缩问题的重叠情况。尤其是在堆叠时，非常适合轻至中等负荷且变形较小的应用。

The notched single-layer wavy spring is a flat wire spring with a small gap at the end. Ideal for overlapping situations that cause height or over compression problems. Especially when stacking, it is very suitable for applications with light to medium load and small deformation.



WG系列

缺口型 Gap Type-WG Series



节省空间



较小变形



中等负荷



WG系列

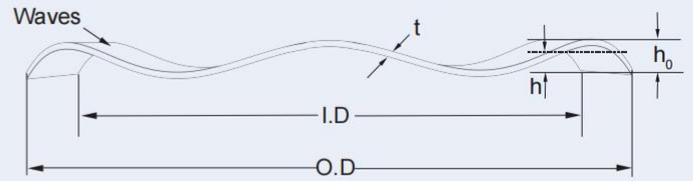
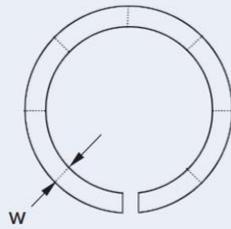
缺口型 Gap Type-WG Series



WG - 0044

系列名称
Wave Springs Overlap Type

轴孔直径
(mm)



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WG-0044	44	36.58	133	4	1	3.56	1.98	0.46	3.63	85
WG-0048	48	39.62	142	4	1	3.81	1.98	0.46	3.63	78
WG-0051	51	42.67	151	4	1	3.56	2.36	0.61	3.81	127
WG-0054	54	45.72	160	4	1	3.81	2.36	0.61	3.81	111
WG-0057	57	49.02	169	4	1	4.32	2.36	0.61	3.81	86
WG-0060	60	50.55	178	4	1	4.06	2.36	0.61	4.52	104
WG-0064	64	53.85	187	4	1	4.32	2.36	0.61	4.52	95
WG-0067	67	56.90	196	4	1	4.83	2.36	0.61	4.52	79
WG-0070	70	59.44	204	4	1	4.32	2.77	0.76	4.78	132
WG-0073	73	62.74	213	4	1	4.57	2.77	0.76	4.78	118
WG-0076	76	65.79	222	4	1	4.83	2.77	0.76	4.78	108
WG-0079	79	68.83	231	4	1	5.33	2.77	0.76	4.78	90
WG-0083	83	69.85	240	4	1	5.08	2.77	0.76	5.92	104
WG-0086	86	72.14	249	4	1	5.59	2.77	0.76	5.92	88
WG-0089	89	76.20	258	4	1	5.84	2.77	0.76	5.92	84
WG-0092	92	79.25	267	4	1	6.10	2.77	0.76	5.92	80
WG-0095	95	82.55	276	4	1	6.60	2.77	0.76	5.92	72
WG-0098	98	85.60	284	4	1	7.62	2.77	0.76	5.92	59
WG-0100	100	86.38	275.9	5	1	4.57	2.77	0.76	5.92	157
WG-0105	105	91.38	289.2	5	1	5.08	2.77	0.76	5.92	134
WG-0110	110	96.38	302.6	5	1	5.33	2.77	0.76	5.92	115
WG-0115	115	101.38	315.9	5	1	6.35	3.18	0.76	5.92	99
WG-0120	120	106.38	329.3	5	1	7.11	3.18	0.76	5.92	86
WG-0125	125	111.38	342.6	5	1	7.62	3.18	0.76	5.92	76
WG-0130	130	116.38	356.0	5	1	8.64	3.18	0.76	5.92	67

PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制

Other materials such as 304 stainless steel and 72A can be customized

波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值



WG系列

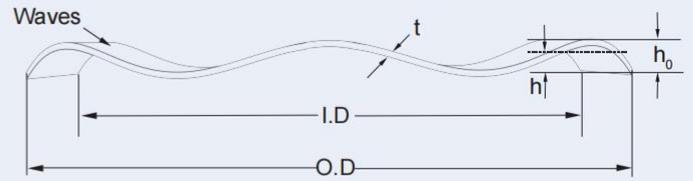
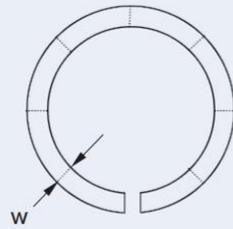
缺口型 Gap Type-WG Series



WG - 0044

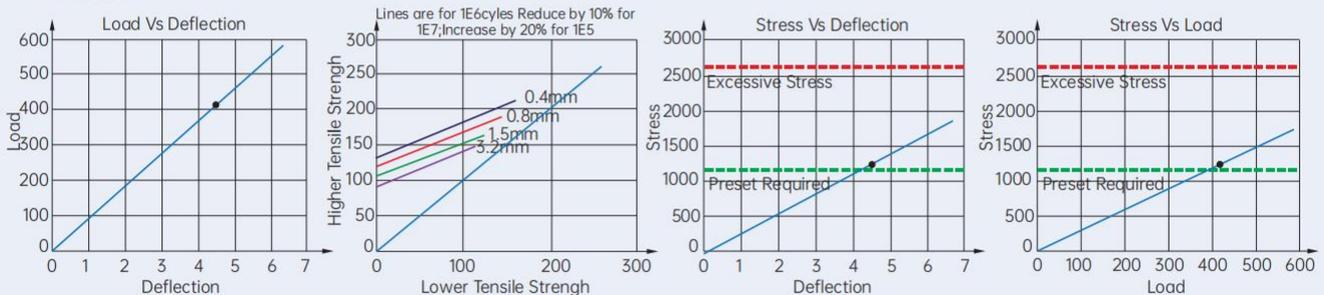
系列名称
Wave Springs Overlap Type

轴孔直径
(mm)



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WG-0130	130	116.38	356.0	5	1	8.64	3.18	0.76	5.92	67
WG-0135	135	121.38	369.3	5	1	9.40	3.18	0.76	5.92	59
WG-0140	140	126.38	382.7	6	1	6.86	3.18	0.76	5.92	108
WG-0145	145	131.38	396.0	6	1	7.37	3.18	0.76	5.92	97
WG-0150	150	136.38	404.9	6	1	7.87	3.18	0.76	5.92	87
WG-0160	160	146.38	440.5	6	1	9.40	3.18	0.76	5.92	71
WG-0165	165	151.38	453.9	6	1	10.41	3.18	0.76	5.92	64
WG-0170	170	156.38	467.2	6	1	11.18	3.18	0.76	5.92	58
WG-0175	175	154.16	480.6	6	1	8.13	3.96	0.81	9.53	116
WG-0180	180	159.16	493.9	6	1	8.64	3.96	0.81	9.53	105
WG-0185	185	164.16	507.3	6	1	9.14	3.96	0.81	9.53	97
WG-0190	190	169.16	520.6	6	1	9.91	3.96	0.81	9.53	88
WG-0200	200	179.16	547.3	7	1	7.11	3.96	0.81	9.53	174
WG-0205	205	184.16	560.7	7	1	7.37	3.96	0.81	9.53	161
WG-0210	210	189.16	578.5	7	1	7.87	3.96	0.81	9.53	149
WG-0215	215	194.16	591.8	7	1	8.38	3.96	0.81	9.53	138
WG-0220	220	199.16	605.2	7	1	8.64	3.96	0.81	9.53	128

WG-0150



PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制

Other materials such as 304 stainless steel and 72A can be customized

波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值



WG系列

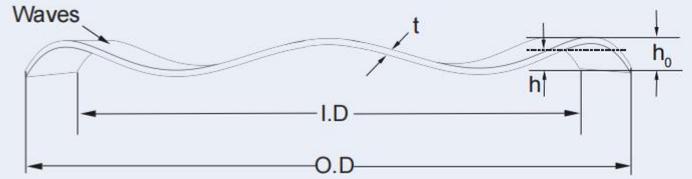
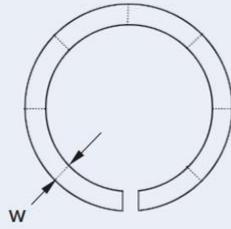
缺口型 Gap Type-WG Series



WG - 0044

系列名称
Wave Springs Overlap Type

轴孔直径
(mm)



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WG-0220	220	199.16	605.2	7	1	8.64	3.96	0.81	9.53	128
WG-0225	225	204.16	618.5	8	1	7.11	3.96	0.81	9.53	203
WG-0230	230	209.16	631.9	9	1	6.10	3.96	0.81	9.53	303
WG-0235	235	214.16	645.2	9	1	6.35	3.96	0.81	9.53	283
WG-0240	240	219.16	658.6	9	1	6.35	3.96	0.81	9.53	265
WG-0250	250	229.16	685.3	9	1	6.86	3.96	0.81	9.53	232
WG-0260	260	239.16	712.0	9	1	7.37	3.96	0.81	9.53	205
WG-0265	265	244.16	725.3	9	1	7.62	3.96	0.81	9.53	193
WG-0270	270	249.16	743.1	9	1	8.13	3.96	0.81	9.53	182
WG-0280	280	259.16	769.8	9	1	8.64	3.96	0.81	9.53	162
WG-0290	290	269.16	796.5	9	1	9.40	3.96	0.81	9.53	144
WG-0300	300	279.16	823.2	9	1	10.41	3.96	0.81	9.53	129
WG-0310	310	289.16	849.9	9	1	7.11	3.96	1.07	9.53	264
WG-0237	320	299.16	876.6	9	1	7.62	3.96	1.07	9.53	239
WG-0340	340	319.16	934.5	9	1	8.64	3.96	1.07	9.53	198
WG-0350	350	329.16	961.1	9	1	9.40	3.96	1.07	9.53	180
WG-0360	360	339.16	987.9	10	1	7.62	3.96	1.07	9.53	271
WG-0370	370	349.16	1014.6	10	1	8.13	3.96	1.07	9.53	249
WG-0380	380	359.16	1041.3	10	1	8.64	3.96	1.07	9.53	229
WG-0390	390	369.16	1072.4	10	1	9.14	3.96	1.07	9.53	211
WG-0400	400	379.16	1099.1	10	1	9.65	3.96	1.07	9.53	196
WG-0410	410	382.82	1125.8	10	1	8.38	3.96	1.07	12.70	251
WG-0420	420	392.82	1152.5	10	1	8.89	3.96	1.07	12.70	233
WG-0430	430	402.82	1179.2	11	1	7.62	3.96	1.07	12.70	317
WG-0440	440	412.82	1205.9	11	1	8.13	3.96	1.07	12.70	295

PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制

Other materials such as 304 stainless steel and 72A can be customized

波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值



WG系列

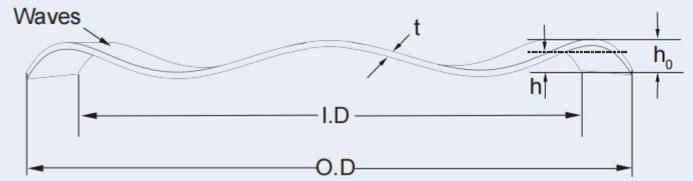
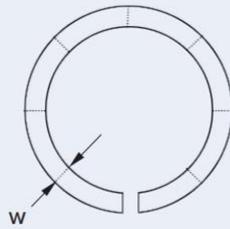
缺口型 Gap Type-WG Series



WG - 0044

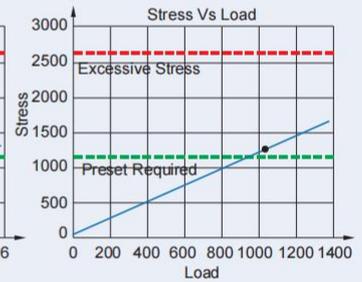
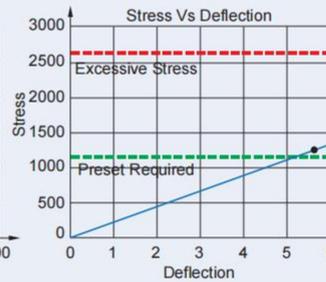
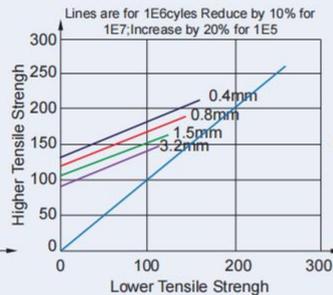
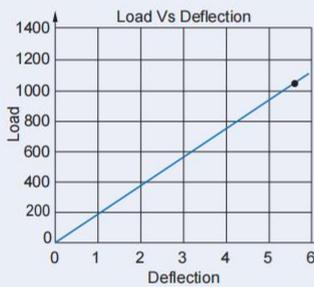
系列名称
Wave Springs Overlap Type

轴孔直径
(mm)



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WG-0440	440	412.82	1205.9	11	1	8.13	3.96	1.07	12.70	295
WG-0460	460	432.82	1263.7	11	1	8.89	3.96	1.07	12.70	256
WG-0480	480	452.82	1317.1	12	1	8.13	3.96	1.07	12.70	318
WG-0500	500	472.82	1370.5	12	1	8.89	3.96	1.07	12.70	280
WG-0540	540	512.82	1481.8	13	1	8.89	3.96	1.07	12.70	303
WG-0580	580	552.82	1593.0	14	1	8.89	3.96	1.07	12.70	327

WG-0380



PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制

Other materials such as 304 stainless steel and 72A can be customized

波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值

What is **对顶波簧** **A WAVE SPRING?**

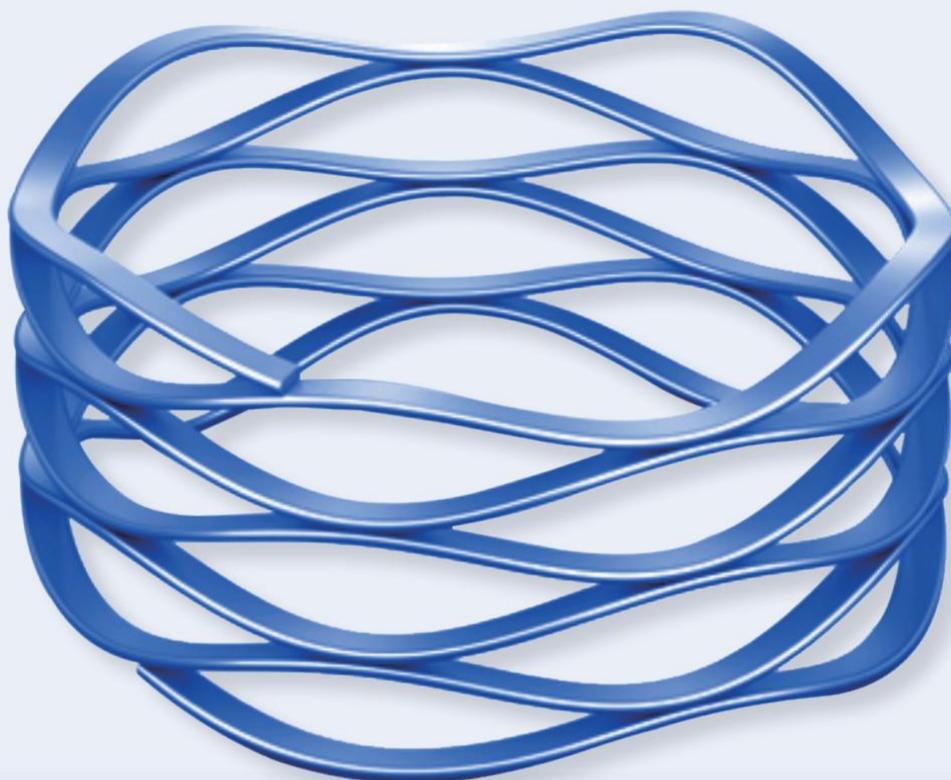
对顶波簧是以串联方式卷绕的扁线多层弹簧。与传统螺旋弹簧相比，这些波形弹簧可提供类似的弹力，同时减少轴向高度(高达50%)。标准对顶弹簧适用于轻至中等负荷和中等行程的应用，是螺旋弹簧的理想替代品。

The counter top wave spring is a flat wire multi-layer spring wound in series. Compared with traditional coil springs, these wave springs can provide similar elasticity while reducing axial height (up to 50%). The standard counter spring is suitable for light to medium load and medium stroke applications, and is an ideal substitute for coil springs.



WM系列

对顶波簧 Wave Springs



减少轴向高度



中等行程

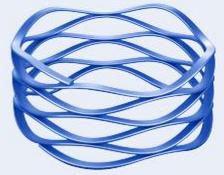


中等负荷



WM系列

对顶波簧 Wave Springs



WM

系列名称

Wave Springs Overlap Type

06

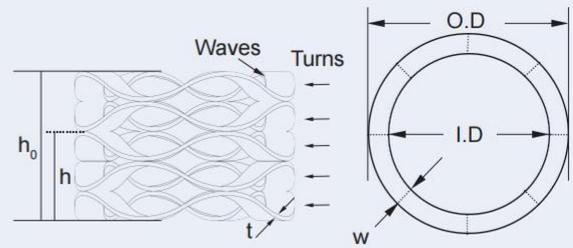
轴孔直径
(mm)

L

负荷大小
(L=小 M=中 H=大)

3

圈数



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WM06-L3	6	4	6	2.5	3	1.52	0.61	0.13	0.50	6.59
WM06-L4	6	4	6	2.5	4	2.03	0.81	0.13	0.50	4.92
WM06-L5	6	4	6	2.5	5	2.54	1.02	0.13	0.50	3.95
WM06-L6	6	4	6	2.5	6	3.05	1.22	0.13	0.50	3.28
WM06-L7	6	4	6	2.5	7	3.56	1.42	0.13	0.50	2.80
WM06-L8	6	4	6	2.5	8	4.06	1.63	0.13	0.50	2.47
WM06-L9	6	4	6	2.5	9	4.57	1.83	0.13	0.50	2.19
WM06-L11	6	4	6	2.5	11	5.59	2.24	0.13	0.50	1.79
WM06-L13	6	4	6	2.5	13	6.60	2.64	0.13	0.50	1.52
WM06-M3	6	4	12	2.5	3	1.52	0.74	0.15	0.60	15.38
WM06-M4	6	4	12	2.5	4	2.03	0.97	0.15	0.60	11.32
WM06-M5	6	4	12	2.5	5	2.54	1.22	0.15	0.60	9.09
WM06-M6	6	4	12	2.5	6	3.05	1.47	0.15	0.60	7.59
WM06-M7	6	4	12	2.5	7	3.56	1.70	0.15	0.60	6.45
WM06-M8	6	4	12	2.5	8	4.06	1.96	0.15	0.60	5.71
WM06-M9	6	4	12	2.5	9	4.57	2.18	0.15	0.60	5.02
WM06-M11	6	4	12	2.5	11	5.59	2.69	0.15	0.60	4.14
WM06-M13	6	4	12	2.5	13	6.60	3.18	0.15	0.60	3.51
WM08-L3	8	5	15	2.5	3	2.82	1.70	0.20	0.80	13.39
WM08-L4	8	5	15	2.5	4	3.76	2.39	0.20	0.80	10.95
WM08-L5	8	5	15	2.5	5	4.70	2.74	0.20	0.80	7.65
WM08-L6	8	5	15	2.5	6	5.64	3.56	0.20	0.80	7.21
WM08-L7	8	5	15	2.5	7	6.58	4.01	0.20	0.80	5.84
WM08-L8	8	5	15	2.5	8	7.52	4.57	0.20	0.80	5.08
WM08-L9	8	5	15	2.5	9	8.46	5.26	0.20	0.80	4.69
WM08-L11	8	5	15	2.5	11	10.34	6.35	0.20	0.80	3.76
WM08-L13	8	5	15	2.5	13	12.22	7.37	0.20	0.80	3.09
WM08-M3	8	5	30	2.5	3	2.82	1.78	0.25	0.80	28.85
WM08-M4	8	5	30	2.5	4	3.76	2.54	0.25	0.80	24.59

PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制。平端请使用“MWF”前缀。

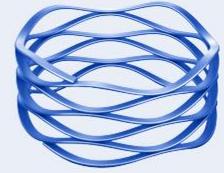
Other materials such as 304 stainless steel and 72A can be customized. Use "MWP" prefix for squared-shim ends.

波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值



WM系列

对顶波簧 Wave Springs



WM

系列名称

Wave Springs Overlap Type

06

轴孔直径

(mm)

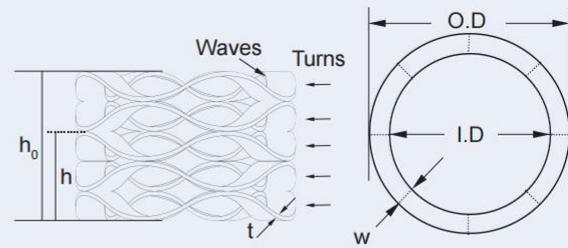
L

负荷大小

(L=小 M=中 H=大)

3

圈数



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WM08-M5	8	5	30	2.5	5	4.70	3.05	0.25	0.80	18.18
WM08-M6	8	5	30	2.5	6	5.64	3.81	0.25	0.80	16.39
WM08-M7	8	5	30	2.5	7	6.58	4.32	0.25	0.80	13.27
WM08-M8	8	5	30	2.5	8	7.52	4.95	0.25	0.80	11.67
WM08-M9	8	5	30	2.5	9	8.46	5.59	0.25	0.80	10.45
WM08-M11	8	5	30	2.5	11	10.34	6.86	0.25	0.80	8.62
WM08-M13	8	5	30	2.5	13	12.22	7.87	0.25	0.80	6.90
WM10-L3	10	7	18	2.5	3	3.96	1.91	0.20	0.80	8.78
WM10-L4	10	7	18	2.5	4	5.28	2.54	0.20	0.80	6.57
WM10-L5	10	7	18	2.5	5	6.60	3.15	0.20	0.80	5.22
WM10-L6	10	7	18	2.5	6	7.92	3.78	0.20	0.80	4.35
WM10-L7	10	7	18	2.5	7	9.25	4.42	0.20	0.80	3.73
WM10-L8	10	7	18	2.5	8	10.57	5.05	0.20	0.80	3.26
WM10-L9	10	7	18	2.5	9	11.89	5.69	0.20	0.80	2.90
WM10-L10	10	7	18	2.5	10	13.21	6.32	0.20	0.80	2.61
WM10-L11	10	7	18	2.5	11	14.53	6.96	0.20	0.80	2.38
WM10-M3	10	7	35	2.5	3	3.96	2.03	0.28	0.80	18.13
WM10-M4	10	7	35	2.5	4	5.28	2.79	0.28	0.80	14.06
WM10-M5	10	7	35	2.5	5	6.60	3.56	0.28	0.80	11.51
WM10-M6	10	7	35	2.5	6	7.92	4.32	0.28	0.80	9.72
WM10-M7	10	7	35	2.5	7	9.25	5.08	0.28	0.80	8.39
WM10-M8	10	7	35	2.5	8	10.57	5.84	0.28	0.80	7.40
WM10-M9	10	7	35	2.5	9	11.89	6.60	0.28	0.80	6.62
WM10-M10	10	7	35	2.5	10	13.21	7.37	0.28	0.80	5.99
WM10-M11	10	7	35	2.5	11	14.53	8.13	0.28	0.80	5.47
WM12-L3	12	9	20	2.5	3	4.34	1.47	0.20	1.00	6.97
WM12-L4	12	9	20	2.5	4	5.79	1.98	0.20	1.00	5.25
WM12-L5	12	9	20	2.5	5	7.24	2.46	0.20	1.00	4.18
WM12-L6	12	9	20	2.5	6	8.69	2.95	0.20	1.00	3.48

PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制。平端请使用“MWF”前缀。

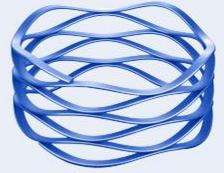
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波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值



WM系列

对顶波簧 Wave Springs



WM

系列名称

Wave Springs Overlap Type

06

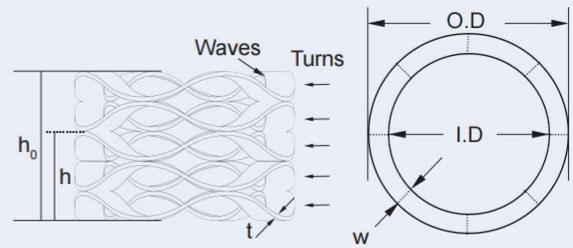
轴孔直径
(mm)

L

负荷大小
(L=小 M=中 H=大)

3

圈数

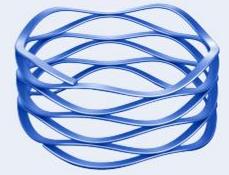


编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WM12-L7	12	9	20	2.5	7	10.13	3.45	0.20	1.00	2.99
WM12-L8	12	9	20	2.5	8	11.58	3.94	0.20	1.00	2.62
WM12-L9	12	9	20	2.5	9	13.03	4.45	0.20	1.00	2.33
WM12-L10	12	9	20	2.5	10	14.48	4.93	0.20	1.00	2.09
WM12-L11	12	9	20	2.5	11	15.93	5.44	0.20	1.00	1.91
WM12-M3	12	8.5	40	2.5	3	4.34	2.36	0.28	1.20	20.20
WM12-M4	12	8.5	40	2.5	4	5.79	3.18	0.28	1.20	15.33
WM12-M5	12	8.5	40	2.5	5	7.24	3.96	0.28	1.20	12.20
WM12-M6	12	8.5	40	2.5	6	8.69	4.75	0.28	1.20	10.15
WM12-M7	12	8.5	40	2.5	7	10.13	5.54	0.28	1.20	8.71
WM12-M8	12	8.5	40	2.5	8	11.58	6.32	0.28	1.20	7.60
WM12-M9	12	8.5	40	2.5	9	13.03	7.11	0.28	1.20	6.76
WM12-M10	12	8.5	40	2.5	10	14.48	7.92	0.28	1.20	6.10
WM12-M11	12	8.5	40	2.5	11	15.93	8.71	0.28	1.20	5.54
WM12-H3	12	8.5	60	2.5	3	4.34	1.98	0.30	1.15	25.42
WM12-H4	12	8.5	60	2.5	4	5.79	2.64	0.30	1.15	19.05
WM12-H5	12	8.5	60	2.5	5	7.24	3.30	0.30	1.15	15.23
WM12-H6	12	8.5	60	2.5	6	8.69	3.99	0.30	1.15	12.77
WM12-H7	12	8.5	60	2.5	7	10.13	4.65	0.30	1.15	10.95
WM12-H8	12	8.5	60	2.5	8	11.58	5.31	0.30	1.15	9.57
WM12-H9	12	8.5	60	2.5	9	13.03	5.97	0.30	1.15	8.50
WM12-H10	12	8.5	60	2.5	10	14.48	6.63	0.30	1.15	7.64
WM12-H11	12	8.5	60	2.5	11	15.93	7.29	0.30	1.15	6.94
WM14-L3	14	10	22	2.5	3	4.95	2.18	0.23	1.48	7.94
WM14-L4	14	10	22	2.5	4	6.60	2.95	0.23	1.48	6.03
WM14-L5	14	10	22	2.5	5	8.26	3.71	0.23	1.48	4.84
WM14-L6	14	10	22	2.5	6	9.91	4.52	0.23	1.48	4.08
WM14-L7	14	10	22	2.5	7	11.56	5.33	0.23	1.48	3.53
WM14-L8	14	10	22	2.5	8	13.21	6.17	0.23	1.48	3.13

PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制。平端请使用“MWF”前缀。

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波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值



WM系列

对顶波簧 Wave Springs

WM

系列名称

Wave Springs Overlap Type

06

轴孔直径

(mm)

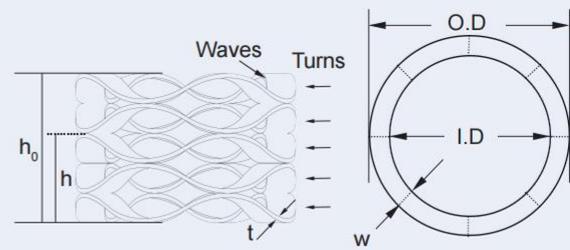
- L

负荷大小

(L=小 M=中 H=大)

3

圈数



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WM14-L9	14	10	22	2.5	9	14.86	7.01	0.23	1.48	2.80
WM14-L10	14	10	22	2.5	10	16.51	7.85	0.23	1.48	2.54
WM14-L11	14	10	22	2.5	11	18.16	8.71	0.23	1.48	2.33
WM14-M3	14	10	50	2.5	3	4.95	2.18	0.30	1.50	18.05
WM14-M4	14	10	50	2.5	4	6.60	2.95	0.30	1.50	13.70
WM14-M5	14	10	50	2.5	5	8.26	3.71	0.30	1.50	10.99
WM14-M6	14	10	50	2.5	6	9.91	4.52	0.30	1.50	9.28
WM14-M7	14	10	50	2.5	7	11.56	5.33	0.30	1.50	8.03
WM14-M8	14	10	50	2.5	8	13.21	6.17	0.30	1.50	7.10
WM14-M9	14	10	50	2.5	9	14.86	7.01	0.30	1.50	6.37
WM14-M10	14	10	50	2.5	10	16.51	7.85	0.30	1.50	5.77
WM14-M11	14	10	50	2.5	11	18.16	8.71	0.30	1.50	5.29
WM14-H3	14	9	80	2.5	3	4.95	3.15	0.38	1.50	44.44
WM14-H4	14	9	80	2.5	4	6.60	4.19	0.38	1.50	33.20
WM14-H5	14	9	80	2.5	5	8.26	5.26	0.38	1.50	26.67
WM14-H6	14	9	80	2.5	6	9.91	6.30	0.38	1.50	22.16
WM14-H7	14	9	80	2.5	7	11.56	7.34	0.38	1.50	18.96
WM14-H8	14	9	80	2.5	8	13.21	8.41	0.38	1.50	16.67
WM14-H9	14	9	80	2.5	9	14.86	9.45	0.38	1.50	14.79
WM14-H10	14	9	80	2.5	10	16.51	10.49	0.38	1.50	13.29
WM14-H11	14	9	80	2.5	11	18.16	11.56	0.38	1.50	12.12
WM15-L3	15	11	25	2.5	3	5.18	2.57	0.25	1.48	9.58
WM15-L4	15	11	25	2.5	4	6.91	3.43	0.25	1.48	7.18
WM15-L5	15	11	25	2.5	5	8.64	4.27	0.25	1.48	5.72
WM15-L6	15	11	25	2.5	6	10.36	5.13	0.25	1.48	4.78
WM15-L7	15	11	25	2.5	7	12.09	5.99	0.25	1.48	4.10
WM15-L8	15	11	25	2.5	8	13.82	6.83	0.25	1.48	3.58
WM15-L9	15	11	25	2.5	9	15.54	7.70	0.25	1.48	3.19
WM15-L10	15	11	25	2.5	10	17.27	8.53	0.25	1.48	2.86

PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制。平端请使用“MWF”前缀。

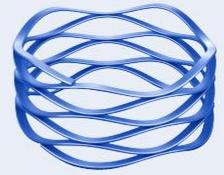
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波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值



WM系列

对顶波簧 Wave Springs



WM

系列名称

Wave Springs Overlap Type

06

轴孔直径

(mm)

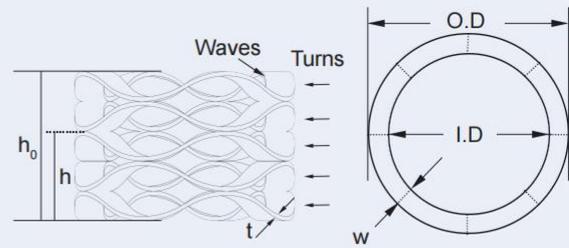
L

负荷大小

(L=小 M=中 H=大)

3

圈数



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WM15-L11	15	11	25	2.5	11	19.00	9.40	0.25	1.48	2.60
WM15-M3	15	10	50	3.5	3	5.18	3.43	0.23	1.48	28.57
WM15-M4	15	10	50	3.5	4	6.91	4.57	0.23	1.48	21.37
WM15-M5	15	10	50	3.5	5	8.64	5.72	0.23	1.48	17.12
WM15-M6	15	10	50	3.5	6	10.36	6.86	0.23	1.48	14.29
WM15-M7	15	10	50	3.5	7	12.09	8.00	0.23	1.48	12.22
WM15-M8	15	10	50	3.5	8	13.82	9.14	0.23	1.48	10.68
WM15-M9	15	10	50	3.5	9	15.54	10.29	0.23	1.48	9.52
WM15-M10	15	10	50	3.5	10	17.27	11.43	0.23	1.48	8.56
WM15-M11	15	10	50	3.5	11	19.00	12.57	0.23	1.48	7.78
WM15-H3	15	10	80	3.5	3	5.18	3.20	0.25	1.48	40.40
WM15-H4	15	10	80	3.5	4	6.91	4.19	0.25	1.48	29.41
WM15-H5	15	10	80	3.5	5	8.64	5.23	0.25	1.48	23.46
WM15-H6	15	10	80	3.5	6	10.36	6.27	0.25	1.48	19.56
WM15-H7	15	10	80	3.5	7	12.09	7.32	0.25	1.48	16.77
WM15-H8	15	10	80	3.5	8	13.82	8.36	0.25	1.48	14.65
WM15-H9	15	10	80	3.5	9	15.54	9.40	0.25	1.48	13.03
WM15-H10	15	10	80	3.5	10	17.27	10.46	0.25	1.48	11.75
WM15-H11	15	10	80	3.5	11	19.00	11.51	0.25	1.48	10.68
WM16-L3	16	11	25	2.5	3	5.41	2.11	0.25	1.48	7.58
WM16-L4	16	11	25	2.5	4	7.21	2.79	0.25	1.48	5.66
WM16-L5	16	11	25	2.5	5	9.02	3.51	0.25	1.48	4.54
WM16-L6	16	11	25	2.5	6	10.82	4.19	0.25	1.48	3.77
WM16-L7	16	11	25	2.5	7	12.62	4.90	0.25	1.48	3.24
WM16-L9	16	11	25	2.5	9	16.23	6.30	0.25	1.48	2.52
WM16-L11	16	11	25	2.5	11	19.84	7.70	0.25	1.48	2.06
WM16-L13	16	11	25	2.5	13	23.44	9.09	0.25	1.48	1.74
WM16-M3	16	11	55	3.5	3	5.41	3.63	0.25	1.48	30.90
WM16-M4	16	11	55	3.5	4	7.21	4.83	0.25	1.48	23.11

PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制。平端请使用“MWF”前缀。

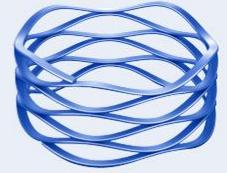
Other materials such as 304 stainless steel and 72A can be customized. Use "MWP" prefix for squared-shim ends.

波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值



WM系列

对顶波簧 Wave Springs



WM

系列名称

Wave Springs Overlap Type

06

轴孔直径

(mm)

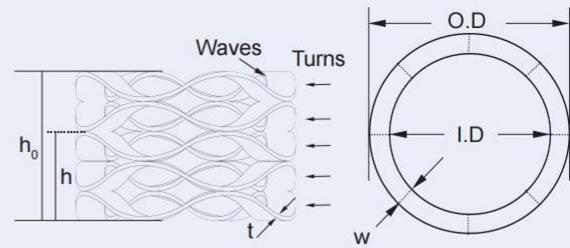
- L

负荷大小

(L=小 M=中 H=大)

3

圈数



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WM16-M5	16	11	55	3.5	5	9.02	6.05	0.25	1.48	18.52
WM16-M6	16	11	55	3.5	6	10.82	7.24	0.25	1.48	15.36
WM16-M7	16	11	55	3.5	7	12.62	8.46	0.25	1.48	13.22
WM16-M9	16	11	55	3.5	9	16.23	10.87	0.25	1.48	10.26
WM16-M11	16	11	55	3.5	11	19.84	13.28	0.25	1.48	8.38
WM16-M13	16	11	55	3.5	13	23.44	15.70	0.25	1.48	7.11
WM16-H3	16	11	90	3.5	3	5.41	3.30	0.30	1.50	42.65
WM16-H4	16	11	90	3.5	4	7.21	4.57	0.30	1.50	34.09
WM16-H5	16	11	90	3.5	5	9.02	5.59	0.30	1.50	26.24
WM16-H6	16	11	90	3.5	6	10.82	6.86	0.30	1.50	22.73
WM16-H7	16	11	90	3.5	7	12.62	7.87	0.30	1.50	18.95
WM16-H9	16	11	90	3.5	9	16.23	10.16	0.30	1.50	14.83
WM16-H11	16	11	90	3.5	11	19.84	12.45	0.30	1.50	12.18
WM16-H13	16	11	90	3.5	13	23.44	14.73	0.30	1.50	10.33
WM18-L3	18	13	30	3.5	3	5.72	3.63	0.20	1.80	14.35
WM18-L4	18	13	30	3.5	4	7.62	4.75	0.20	1.80	10.45
WM18-L5	18	13	30	3.5	5	9.53	5.94	0.20	1.80	8.36
WM18-L6	18	13	30	3.5	6	11.43	7.14	0.20	1.80	6.99
WM18-L7	18	13	30	3.5	7	13.34	8.31	0.20	1.80	5.96
WM18-L9	18	13	30	3.5	9	17.15	10.69	0.20	1.80	4.64
WM18-L12	18	13	30	3.5	12	22.86	14.25	0.20	1.80	3.48
WM18-M3	18	13	55	3.5	3	5.72	3.68	0.25	1.85	26.96
WM18-M4	18	13	55	3.5	4	7.62	4.98	0.25	1.85	20.83
WM18-M5	18	13	55	3.5	5	9.53	6.22	0.25	1.85	16.62
WM18-M6	18	13	55	3.5	6	11.43	7.47	0.25	1.85	13.89
WM18-M7	18	13	55	3.5	7	13.34	8.74	0.25	1.85	11.96
WM18-M9	18	13	55	3.5	9	17.15	11.23	0.25	1.85	9.29
WM18-M12	18	13	55	3.5	12	22.86	14.96	0.25	1.85	6.96
WM18-H3	18	13	90	3.5	3	5.72	3.84	0.30	1.85	47.87

PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制。平端请使用“MWF”前缀。

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波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值



WM系列

对顶波簧 Wave Springs

WM

系列名称

Wave Springs Overlap Type

06

轴孔直径

(mm)

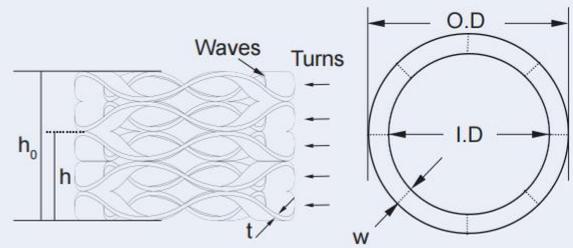
- L

负荷大小

(L=小 M=中 H=大)

3

圈数



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WM18-H4	18	13	90	3.5	4	7.62	5.13	0.30	1.85	36.14
WM18-H5	18	13	90	3.5	5	9.53	6.40	0.30	1.85	28.75
WM18-H6	18	13	90	3.5	6	11.43	7.70	0.30	1.85	24.13
WM18-H7	18	13	90	3.5	7	13.34	8.97	0.30	1.85	20.59
WM18-H9	18	13	90	3.5	9	17.15	11.53	0.30	1.85	16.01
WM18-H12	18	13	90	3.5	12	22.86	15.37	0.30	1.85	12.02
WM20-L3	20	15	35	3.5	3	6.32	2.72	0.20	1.80	9.72
WM20-L4	20	15	35	3.5	4	8.43	3.61	0.20	1.80	7.26
WM20-L5	20	15	35	3.5	5	10.54	4.52	0.20	1.80	5.81
WM20-L6	20	15	35	3.5	6	12.65	5.41	0.20	1.80	4.83
WM20-L7	20	15	35	3.5	7	14.76	6.32	0.20	1.80	4.15
WM20-L9	20	15	35	3.5	9	18.97	8.13	0.20	1.80	3.23
WM20-L12	20	15	35	3.5	12	25.30	10.82	0.20	1.80	2.42
WM20-M3	20	14	70	3.5	3	6.32	3.05	0.25	2.00	21.41
WM20-M4	20	14	70	3.5	4	8.43	4.06	0.25	2.00	16.02
WM20-M5	20	14	70	3.5	5	10.54	5.08	0.25	2.00	12.82
WM20-M6	20	14	70	3.5	6	12.65	6.27	0.25	2.00	10.97
WM20-M7	20	14	70	3.5	7	14.76	7.32	0.25	2.00	9.41
WM20-M9	20	14	70	3.5	9	18.97	9.17	0.25	2.00	7.14
WM20-M12	20	14	70	3.5	12	25.3	12.22	0.25	2.00	5.35
WM20-H3	20	14	100	3.5	3	6.32	4.24	0.33	2.00	48.08
WM20-H4	20	14	100	3.5	4	8.43	5.66	0.33	2.00	36.1
WM20-H5	20	14	100	3.5	5	10.54	7.06	0.33	2.00	28.74
WM20-H6	20	14	100	3.5	6	12.65	8.48	0.33	2.00	23.98
WM20-H7	20	14	100	3.5	7	14.76	9.91	0.33	2.00	20.62
WM20-H9	20	14	100	3.5	9	18.97	12.73	0.33	2.00	16.03
WM20-H12	20	14	100	3.5	12	25.3	16.97	0.33	2.00	12
WM25-L3	25	19	50	3.5	3	6.63	2.06	0.25	2.18	10.94
WM25-L4	25	19	50	3.5	4	8.84	2.74	0.25	2.18	8.2

PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制。平端请使用“MWF”前缀。

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WM系列

对顶波簧 Wave Springs

WM

系列名称

Wave Springs Overlap Type

06

轴孔直径

(mm)

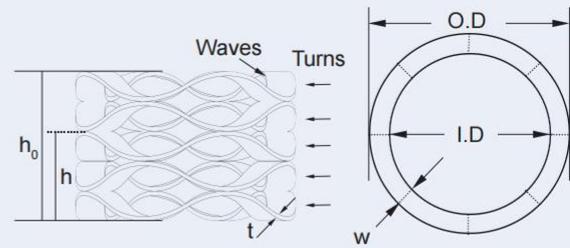
- L

负荷大小

(L=小 M=中 H=大)

3

圈数



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WM25-L5	25	19	50	3.5	5	11.05	3.43	0.25	2.18	6.56
WM25-L6	25	19	50	3.5	6	13.26	4.11	0.25	2.18	5.46
WM25-L7	25	19	50	3.5	7	15.47	4.8	0.25	2.18	4.69
WM25-L9	25	19	50	3.5	9	19.89	6.2	0.25	2.18	3.65
WM25-L12	25	19	50	3.5	12	26.52	8.26	0.25	2.18	2.74
WM25-M3	25	19	80	3.5	3	6.63	2.95	0.3	2.40	21.74
WM25-M4	25	19	80	3.5	4	8.84	3.94	0.3	2.40	16.33
WM25-M5	25	19	80	3.5	5	11.05	4.9	0.3	2.40	13.01
WM25-M6	25	19	80	3.5	6	13.26	5.89	0.3	2.40	10.85
WM25-M7	25	19	80	3.5	7	15.47	6.88	0.3	2.40	9.31
WM25-M9	25	19	80	3.5	9	19.89	8.84	0.3	2.40	7.24
WM25-M12	25	19	80	3.5	12	26.52	11.79	0.3	2.40	5.43
WM25-H3	25	19	110	3.5	3	6.63	4.04	0.38	2.40	42.47
WM25-H4	25	19	110	3.5	4	8.84	5.38	0.38	2.40	31.79
WM25-H5	25	19	110	3.5	5	11.05	6.73	0.38	2.40	25.46
WM25-H6	25	19	110	3.5	6	13.26	8.08	0.38	2.40	21.24
WM25-H7	25	19	110	3.5	7	15.47	9.4	0.38	2.40	18.12
WM25-H9	25	19	110	3.5	9	19.89	12.12	0.38	2.40	14.16
WM25-H12	25	19	110	3.5	12	26.52	16.15	0.38	2.40	10.61
WM28-L3	28	22	50	3.5	3	7.24	3.76	0.3	2.40	14.37
WM28-L4	28	22	50	3.5	4	9.65	5	0.3	2.40	10.75
WM28-L5	28	22	50	3.5	5	12.07	6.27	0.3	2.40	8.62
WM28-L6	28	22	50	3.5	6	14.48	7.52	0.3	2.40	7.18
WM28-L7	28	22	50	3.5	7	16.89	8.79	0.3	2.40	6.17
WM28-L8	28	22	50	3.5	8	19.3	10.03	0.3	2.40	5.39
WM28-L9	28	22	50	3.5	9	21.72	11.28	0.3	2.40	4.79
WM28-L11	28	22	50	3.5	11	26.54	13.79	0.3	2.40	3.92
WM28-L13	28	22	50	3.5	13	31.37	16.31	0.3	2.40	3.32
WM28-M3	28	22	80	3.5	3	7.24	4.39	0.38	2.40	28.07

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WM系列

对顶波簧 Wave Springs

WM

系列名称

Wave Springs Overlap Type

06

轴孔直径

(mm)

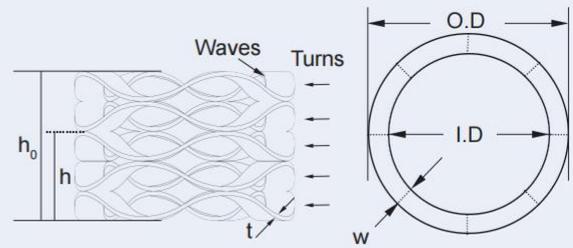
- L

负荷大小

(L=小 M=中 H=大)

3

圈数



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WM28-M4	28	22	80	3.5	4	9.65	5.84	0.38	2.40	21
WM28-M5	28	22	80	3.5	5	12.07	7.32	0.38	2.40	16.84
WM28-M6	28	22	80	3.5	6	14.48	8.79	0.38	2.40	14.06
WM28-M7	28	22	80	3.5	7	16.89	10.24	0.38	2.40	12.03
WM28-M8	28	22	80	3.5	8	19.3	11.71	0.38	2.40	10.54
WM28-M9	28	22	80	3.5	9	21.72	13.18	0.38	2.40	9.37
WM28-M11	28	22	80	3.5	11	26.54	16.1	0.38	2.40	7.66
WM28-M13	28	22	80	3.5	13	31.37	19.02	0.38	2.40	6.48
WM28-H3	28	22	130	3.5	3	7.24	4.57	0.46	2.40	48.69
WM28-H4	28	22	130	3.5	4	9.65	6.07	0.46	2.40	36.31
WM28-H5	28	22	130	3.5	5	12.07	7.59	0.46	2.40	29.02
WM28-H6	28	22	130	3.5	6	14.48	9.12	0.46	2.40	24.25
WM28-H7	28	22	130	3.5	7	16.89	10.64	0.46	2.40	20.8
WM28-H8	28	22	130	3.5	8	19.3	12.17	0.46	2.40	18.23
WM28-H9	28	22	130	3.5	9	21.72	13.69	0.46	2.40	16.19
WM28-H11	28	22	130	3.5	11	26.54	16.71	0.46	2.40	13.22
WM28-H13	28	22	130	3.5	13	31.37	19.76	0.46	2.40	11.2
WM30-L3	30	24	50	3.5	3	7.62	3.18	0.3	2.40	11.26
WM30-L4	30	24	50	3.5	4	10.16	4.22	0.3	2.40	8.42
WM30-L5	30	24	50	3.5	5	12.7	5.28	0.3	2.40	6.74
WM30-L6	30	24	50	3.5	6	15.24	6.32	0.3	2.40	5.61
WM30-L7	30	24	50	3.5	7	17.78	7.39	0.3	2.40	4.81
WM30-L8	30	24	50	3.5	8	20.32	8.43	0.3	2.40	4.21
WM30-L9	30	24	50	3.5	9	22.86	9.5	0.3	2.40	3.74
WM30-L11	30	24	50	3.5	11	27.94	11.61	0.3	2.40	3.06
WM30-L13	30	24	50	3.5	13	33.02	13.72	0.3	2.40	2.59
WM30-M3	30	24	90	3.5	3	7.62	3.51	0.38	2.40	21.9
WM30-M4	30	24	90	3.5	4	10.16	4.7	0.38	2.40	16.48
WM30-M5	30	24	90	3.5	5	12.7	5.87	0.38	2.40	13.18

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WM系列

对顶波簧 Wave Springs

WM

系列名称

Wave Springs Overlap Type

06

轴孔直径

(mm)

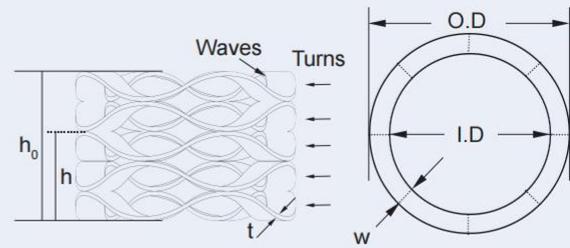
- L

负荷大小

(L=小 M=中 H=大)

3

圈数



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WM30-M6	30	24	90	3.5	6	15.24	7.04	0.38	2.40	10.98
WM30-M7	30	24	90	3.5	7	17.78	8.2	0.38	2.40	9.39
WM30-M8	30	24	90	3.5	8	20.32	9.37	0.38	2.40	8.22
WM30-M9	30	24	90	3.5	9	22.86	10.54	0.38	2.40	7.31
WM30-M11	30	24	90	3.5	11	27.94	12.9	0.38	2.40	5.98
WM30-M13	30	24	90	3.5	13	33.02	15.24	0.38	2.40	5.06
WM30-H3	30	24	130	3.5	3	7.62	4.19	0.46	2.40	37.9
WM30-H4	30	24	130	3.5	4	10.16	5.59	0.46	2.40	28.45
WM30-H5	30	24	130	3.5	5	12.7	6.99	0.46	2.40	22.77
WM30-H6	30	24	130	3.5	6	15.24	8.38	0.46	2.40	18.95
WM30-H7	30	24	130	3.5	7	17.78	9.78	0.46	2.40	16.25
WM30-H8	30	24	130	3.5	8	20.32	11.18	0.46	2.40	14.22
WM30-H9	30	24	130	3.5	9	22.86	12.57	0.46	2.40	12.63
WM30-H11	30	24	130	3.5	11	27.94	15.37	0.46	2.40	10.34
WM30-H13	30	24	130	3.5	13	33.02	18.16	0.46	2.40	8.75
WM35-L3	35	27	70	3.5	3	8.38	3.94	0.36	3.20	15.77
WM35-L4	35	27	70	3.5	4	11.18	5.23	0.36	3.20	11.76
WM35-L5	35	27	70	3.5	5	13.97	6.55	0.36	3.20	9.43
WM35-L6	35	27	70	3.5	6	16.76	7.87	0.36	3.20	7.87
WM35-L7	35	27	70	3.5	7	19.56	9.17	0.36	3.20	6.74
WM35-L8	35	27	70	3.5	8	22.35	10.49	0.36	3.20	5.9
WM35-L9	35	27	70	3.5	9	25.15	11.81	0.36	3.20	5.25
WM35-L11	35	27	70	3.5	11	30.73	14.43	0.36	3.20	4.29
WM35-L13	35	27	70	3.5	13	36.32	17.04	0.36	3.20	3.63
WM35-M3	35	27	110	3.5	3	8.38	4.14	0.41	3.40	25.94
WM35-M4	35	27	110	3.5	4	11.18	5.51	0.41	3.40	19.4
WM35-M5	35	27	110	3.5	5	13.97	6.88	0.41	3.40	15.51
WM35-M6	35	27	110	3.5	6	16.76	8.26	0.41	3.40	12.94
WM35-M7	35	27	110	3.5	7	19.56	9.63	0.41	3.40	11.08

PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制。平端请使用“MWF”前缀。

Other materials such as 304 stainless steel and 72A can be customized. Use "MWP" prefix for squared-shim ends.

波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值



WM系列

对顶波簧 Wave Springs

WM

系列名称

Wave Springs Overlap Type

06

轴孔直径

(mm)

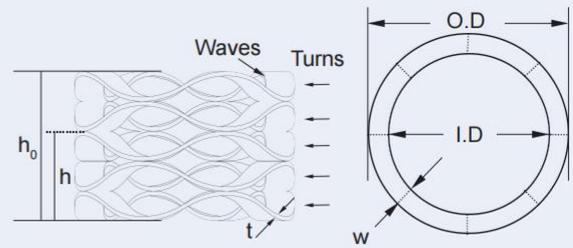
- L

负荷大小

(L=小 M=中 H=大)

3

圈数



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WM35-M8	35	27	110	3.5	8	22.35	11.02	0.41	3.40	9.71
WM35-M9	35	27	110	3.5	9	25.15	12.4	0.41	3.40	8.63
WM35-M11	35	27	110	3.5	11	30.73	15.14	0.41	3.40	7.06
WM35-M13	35	27	110	3.5	13	36.32	17.91	0.41	3.40	5.98
WM35-H3	35	27	160	3.5	3	8.38	4.04	0.46	3.40	36.87
WM35-H4	35	27	160	3.5	4	11.18	5.38	0.46	3.40	27.59
WM35-H5	35	27	160	3.5	5	13.97	6.73	0.46	3.40	22.1
WM35-H6	35	27	160	3.5	6	16.76	8.08	0.46	3.40	18.43
WM35-H7	35	27	160	3.5	7	19.56	9.42	0.46	3.40	15.78
WM35-H8	35	27	160	3.5	8	22.35	10.77	0.46	3.40	13.82
WM35-H9	35	27	160	3.5	9	25.15	12.12	0.46	3.40	12.28
WM35-H11	35	27	160	3.5	11	30.73	14.81	0.46	3.40	10.05
WM35-H13	35	27	160	3.5	13	36.32	17.5	0.46	3.40	8.5
WM40-L3	40	30	100	3.5	3	9.14	2.9	0.41	3.40	16.03
WM40-L4	40	30	100	3.5	4	12.19	3.86	0.41	3.40	12
WM40-L5	40	30	100	3.5	5	15.24	4.8	0.41	3.40	9.58
WM40-L6	40	30	100	3.5	6	18.29	5.77	0.41	3.40	7.99
WM40-L7	40	30	100	3.5	7	21.34	6.73	0.41	3.40	6.84
WM40-L8	40	30	100	3.5	8	24.38	7.7	0.41	3.40	6
WM40-L9	40	30	100	3.5	9	27.43	8.66	0.41	3.40	5.33
WM40-L11	40	30	100	3.5	11	33.53	10.59	0.41	3.40	4.36
WM40-L13	40	30	100	3.5	13	39.62	12.52	0.41	3.40	3.69
WM40-M3	40	30	150	3.5	3	9.14	5.44	0.53	3.65	40.54
WM40-M4	40	30	150	3.5	4	12.19	7.24	0.53	3.65	30.3
WM40-M5	40	30	150	3.5	5	15.24	9.04	0.53	3.65	24.19
WM40-M6	40	30	150	3.5	6	18.29	10.85	0.53	3.65	20.16
WM40-M7	40	30	150	3.5	7	21.34	12.65	0.53	3.65	17.26
WM40-M8	40	30	150	3.5	8	24.38	14.48	0.53	3.65	15.15
WM40-M9	40	30	150	3.5	9	27.43	16.28	0.53	3.65	13.45

PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制。平端请使用“MWF”前缀。

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波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值



WM系列

对顶波簧 Wave Springs

WM

系列名称

Wave Springs Overlap Type

06

轴孔直径

(mm)

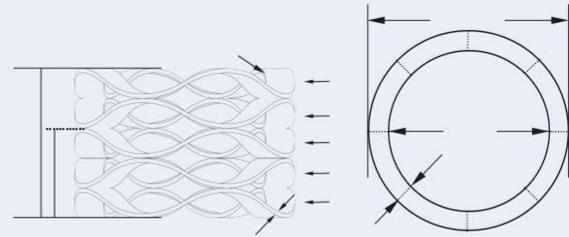
- L

负荷大小

(L=小 M=中 H=大)

3

圈数



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WM40-M11	40	30	150	3.5	11	33.53	19.89	0.53	3.65	11
WM40-M13	40	30	150	3.5	13	39.62	23.5	0.53	3.65	9.31
WM40-H3	40	30	300	4.5	3	9.14	5.66	0.46	3.40	86.21
WM40-H4	40	30	300	4.5	4	12.19	7.54	0.46	3.40	64.52
WM40-H5	40	30	300	4.5	5	15.24	9.42	0.46	3.40	51.55
WM40-H6	40	30	300	4.5	6	18.29	11.33	0.46	3.40	43.1
WM40-H7	40	30	300	4.5	7	21.34	13.21	0.46	3.40	36.9
WM40-H8	40	30	300	4.5	8	24.38	15.09	0.46	3.40	32.29
WM40-H9	40	30	300	4.5	9	27.45	16.97	0.46	3.40	28.68
WM40-H11	40	30	300	4.5	11	33.53	20.75	0.46	3.40	23.47
WM40-H13	40	30	300	4.5	13	39.62	24.54	0.46	3.40	19.89
WM45-L3	45	35	110	3.5	3	9.91	3.38	0.46	3.65	16.85
WM45-L4	45	35	110	3.5	4	13.21	4.52	0.46	3.65	12.66
WM45-L5	45	35	110	3.5	5	16.51	5.64	0.46	3.65	10.12
WM45-L6	45	35	110	3.5	6	19.81	6.76	0.46	3.65	8.43
WM45-L7	45	35	110	3.5	7	23.11	7.9	0.46	3.65	7.23
WM45-L8	45	35	110	3.5	8	26.42	9.02	0.46	3.65	6.32
WM45-L9	45	35	110	3.5	9	29.72	10.16	0.46	3.65	5.62
WM45-L11	45	35	110	3.5	11	36.32	12.4	0.46	3.65	4.6
WM45-L13	45	35	110	3.5	13	42.93	14.66	0.46	3.65	3.89
WM45-M3	45	35	225	4.5	3	9.91	5.33	0.46	3.65	49.13
WM45-M4	45	35	225	4.5	4	13.21	6.99	0.46	3.65	36.17
WM45-M5	45	35	225	4.5	5	16.51	9.14	0.46	3.65	30.53
WM45-M6	45	35	225	4.5	6	19.81	10.8	0.46	3.65	24.97
WM45-M7	45	35	225	4.5	7	23.11	12.7	0.46	3.65	21.61
WM45-M8	45	35	225	4.5	8	26.42	14.48	0.46	3.65	18.84
WM45-M9	45	35	225	4.5	9	29.72	16.26	0.46	3.65	16.72
WM45-M11	45	35	225	4.5	11	36.32	19.81	0.46	3.65	13.63
WM45-M13	45	35	225	4.5	13	42.93	23.37	0.46	3.65	11.5

PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制。平端请使用“MWF”前缀。

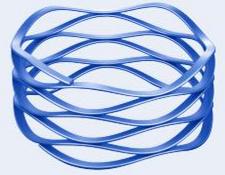
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波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值



WM系列

对顶波簧 Wave Springs



WM

系列名称

Wave Springs Overlap Type

06

轴孔直径

(mm)

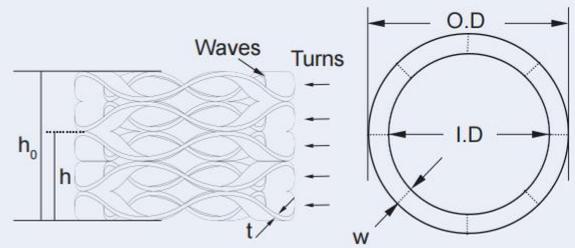
- L

负荷大小

(L=小 M=中 H=大)

3

圈数

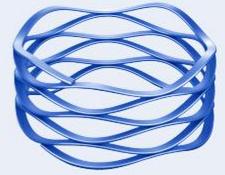


编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WM45-H3	45	35	400	4.5	3	9.91	6.43	0.61	3.75	114.94
WM45-H4	45	35	400	4.5	4	13.21	8.38	0.61	3.75	82.82
WM45-H5	45	35	400	4.5	5	16.51	11.2	0.61	3.75	75.33
WM45-H6	45	35	400	4.5	6	19.81	12.95	0.61	3.75	58.31
WM45-H7	45	35	400	4.5	7	23.11	15.37	0.61	3.75	51.68
WM45-H8	45	35	400	4.5	8	26.42	17.27	0.61	3.75	43.72
WM45-H9	45	35	400	4.5	9	29.72	19.68	0.61	3.75	39.88
WM45-H11	45	35	400	4.5	11	36.32	24.26	0.61	3.75	33.17
WM45-H13	45	35	400	4.5	13	42.93	28.45	0.61	3.75	27.62
WM50-L3	50	40	110	3.5	3	10.29	4.83	0.53	3.65	20.15
WM50-L4	50	40	110	3.5	4	13.72	6.1	0.53	3.65	14.44
WM50-L5	50	40	110	3.5	5	17.15	7.87	0.53	3.65	11.85
WM50-L6	50	40	110	3.5	6	20.57	9.4	0.53	3.65	9.85
WM50-L7	50	40	110	3.5	7	24	11.3	0.53	3.65	8.66
WM50-L8	50	40	110	3.5	8	27.43	12.7	0.53	3.65	7.47
WM50-L9	50	40	110	3.5	9	30.86	14.99	0.53	3.65	6.93
WM50-L11	50	40	110	3.5	11	37.72	18.16	0.53	3.65	5.62
WM50-L13	50	40	110	3.5	13	44.58	21.34	0.53	3.65	4.73
WM50-L15	50	40	110	3.5	15	51.44	24.64	0.53	3.65	4.1
WM50-M3	50	40	225	4.5	3	10.29	4.62	0.46	3.65	39.68
WM50-M4	50	40	225	4.5	4	13.72	5.84	0.46	3.65	30.53
WM50-M5	50	40	225	4.5	5	17.15	7.49	0.46	3.65	23.29
WM50-M6	50	40	225	4.5	6	20.57	8.89	0.46	3.65	19.26
WM50-M7	50	40	225	4.5	7	24	10.54	0.46	3.65	16.72
WM50-M8	50	40	225	4.5	8	27.43	11.89	0.46	3.65	14.48
WM50-M9	50	40	225	4.5	9	30.86	13.59	0.46	3.65	13.03
WM50-M11	50	40	225	4.5	11	37.72	16.71	0.46	3.65	10.71
WM50-M13	50	40	225	4.5	13	44.58	19.61	0.46	3.65	9.01
WM50-M15	50	40	225	4.5	15	51.44	22.48	0.46	3.65	7.77

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波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值



WM系列

对顶波簧 Wave Springs

WM

系列名称

Wave Springs Overlap Type

06

轴孔直径

(mm)

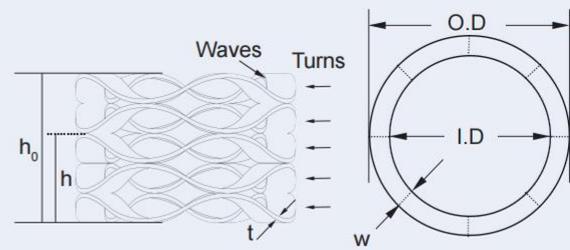
- L

负荷大小

(L=小 M=中 H=大)

3

圈数



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WM50-H3	50	40	400	4.5	3	10.29	5.92	0.61	3.75	91.53
WM50-H4	50	40	400	4.5	4	13.72	7.8	0.61	3.75	67.57
WM50-H5	50	40	400	4.5	5	17.15	10.16	0.61	3.75	57.22
WM50-H6	50	40	400	4.5	6	20.57	11.79	0.61	3.75	45.56
WM50-H7	50	40	400	4.5	7	24	14.15	0.61	3.75	40.61
WM50-H8	50	40	400	4.5	8	27.43	15.62	0.61	3.75	33.87
WM50-H9	50	40	400	4.5	9	30.86	17.91	0.61	3.75	30.89
WM50-H11	50	40	400	4.5	11	37.72	21.54	0.61	3.75	24.72
WM50-H13	50	40	400	4.5	13	44.58	25.65	0.61	3.75	21.13
WM50-H15	50	40	400	4.5	15	51.44	29.21	0.61	3.75	17.99
WM55-L3	55	45	125	3.5	3	11.05	5.59	0.61	3.75	22.89
WM55-L4	55	45	125	3.5	4	14.73	7.72	0.61	3.75	17.83
WM55-L5	55	45	125	3.5	5	18.41	9.68	0.61	3.75	14.3
WM55-L6	55	45	125	3.5	6	22.1	11.48	0.61	3.75	11.77
WM55-L7	55	45	125	3.5	7	25.78	13.92	0.61	3.75	10.54
WM55-L8	55	45	125	3.5	8	29.46	15.52	0.61	3.75	8.97
WM55-L9	55	45	125	3.5	9	33.15	18.41	0.61	3.75	8.49
WM55-L11	55	45	125	3.5	11	40.51	21.67	0.61	3.75	6.63
WM55-L13	55	45	125	3.5	13	47.88	25.65	0.61	3.75	5.62
WM55-L15	55	45	125	3.5	15	55.25	29.77	0.61	3.75	4.91
WM55-M3	55	45	250	4.5	3	11.05	3.1	0.46	3.65	31.45
WM55-M4	55	45	250	4.5	4	14.73	4.11	0.46	3.65	23.54
WM55-M5	55	45	250	4.5	5	18.41	5.16	0.46	3.65	18.85
WM55-M6	55	45	250	4.5	6	22.1	6.2	0.46	3.65	15.72
WM55-M7	55	45	250	4.5	7	25.78	7.21	0.46	3.65	13.46
WM55-M8	55	45	250	4.5	8	29.46	8.26	0.46	3.65	11.79
WM55-M9	55	45	250	4.5	9	33.15	9.27	0.46	3.65	10.47
WM55-M11	55	45	250	4.5	11	40.51	11.33	0.46	3.65	8.57
WM55-M13	55	45	250	4.5	13	47.88	13.41	0.46	3.65	7.25

PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制。平端请使用“MWF”前缀。

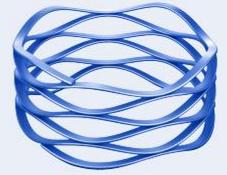
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波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值



WM系列

对顶波簧 Wave Springs



WM

系列名称

Wave Springs Overlap Type

06

轴孔直径

(mm)

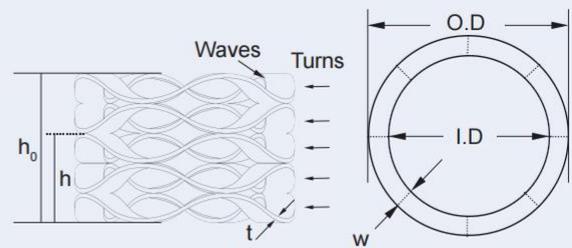
L

负荷大小

(L=小 M=中 H=大)

3

圈数



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WM55-M15	55	45	250	4.5	15	55.25	15.47	0.46	3.65	6.28
WM55-H3	55	45	400	4.5	3	11.05	5.31	0.61	3.75	69.69
WM55-H4	55	45	400	4.5	4	14.73	7.24	0.61	3.75	53.4
WM55-H5	55	45	400	4.5	5	18.41	9.09	0.61	3.75	42.87
WM55-H6	55	45	400	4.5	6	22.1	10.64	0.61	3.75	34.9
WM55-H7	55	45	400	4.5	7	25.78	12.24	0.61	3.75	29.54
WM55-H8	55	45	400	4.5	8	29.46	14.1	0.61	3.75	26.04
WM55-H9	55	45	400	4.5	9	33.15	15.82	0.61	3.75	23.08
WM55-H11	55	45	400	4.5	11	40.51	19.3	0.61	3.75	18.86
WM55-H13	55	45	400	4.5	13	47.88	23.11	0.61	3.75	16.15
WM55-H15	55	45	400	4.5	15	55.25	26.54	0.61	3.75	13.93
WM60-L3	60	50	135	4.5	3	11.43	5.59	0.46	3.65	23.12
WM60-L4	60	50	135	4.5	4	15.24	7.47	0.46	3.65	17.37
WM60-L5	60	50	135	4.5	5	19.05	9.32	0.46	3.65	13.87
WM60-L6	60	50	135	4.5	6	22.86	11.2	0.46	3.65	11.58
WM60-L7	60	50	135	4.5	7	26.67	13.06	0.46	3.65	9.92
WM60-L8	60	50	135	4.5	8	30.48	14.94	0.46	3.65	8.69
WM60-L9	60	50	135	4.5	9	34.29	16.79	0.46	3.65	7.71
WM60-L11	60	50	135	4.5	11	41.91	20.52	0.46	3.65	6.31
WM60-L13	60	50	135	4.5	13	49.53	24.26	0.46	3.65	5.34
WM60-L15	60	50	135	4.5	15	57.15	27.99	0.46	3.65	4.63
WM60-M3	60	50	275	4.5	3	11.43	6.65	0.61	3.75	57.53
WM60-M4	60	50	275	4.5	4	15.24	8.86	0.61	3.75	43.1
WM60-M5	60	50	275	4.5	5	19.05	11.07	0.61	3.75	34.46
WM60-M6	60	50	275	4.5	6	22.86	13.28	0.61	3.75	28.71
WM60-M7	60	50	275	4.5	7	26.67	15.49	0.61	3.75	24.6
WM60-M8	60	50	275	4.5	8	30.48	17.7	0.61	3.75	21.52
WM60-M9	60	50	275	4.5	9	34.29	19.94	0.61	3.75	19.16
WM60-M11	60	50	275	4.5	11	41.91	24.36	0.61	3.75	15.67

PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制。平端请使用“MWF”前缀。

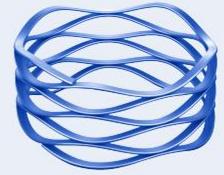
Other materials such as 304 stainless steel and 72A can be customized. Use "MWP" prefix for squared-shim ends.

波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值



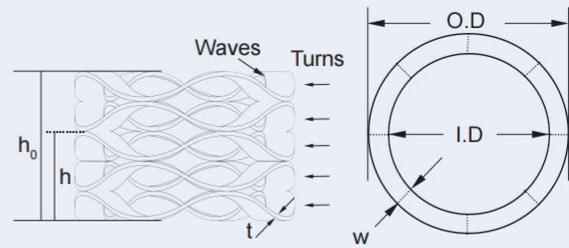
WM系列

对顶波簧 Wave Springs



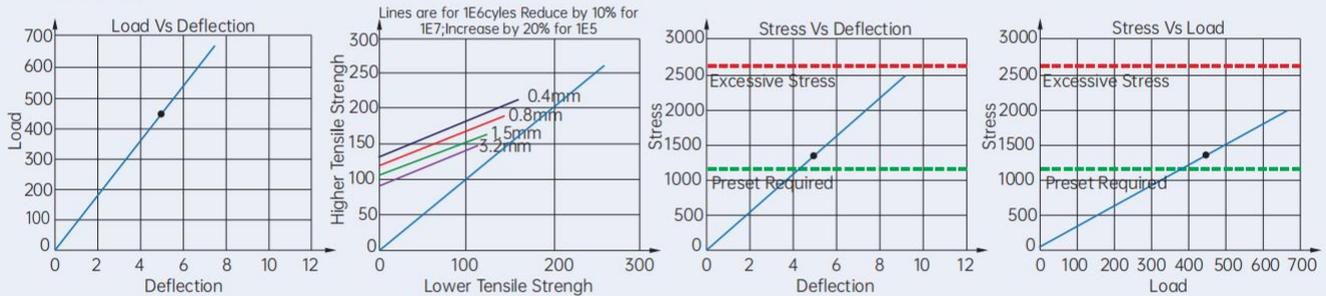
WM - **06** - **L** **3**

系列名称 轴孔直径 负荷大小 圈数
Wave Springs Overlap Type (mm) (L=小 M=中 H=大)



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WM60-M13	60	50	275	4.5	13	49.53	28.78	0.61	3.75	13.25
WM60-M15	60	50	275	4.5	15	57.15	33.22	0.61	3.75	11.49
WM60-H3	60	50	450	4.5	3	11.43	7.75	0.76	4.00	122.28
WM60-H4	60	50	450	4.5	4	15.24	10.31	0.76	4.00	91.28
WM60-H5	60	50	450	4.5	5	19.05	12.9	0.76	4.00	73.17
WM60-H6	60	50	450	4.5	6	22.86	15.47	0.76	4.00	60.89
WM60-H7	60	50	450	4.5	7	26.67	18.06	0.76	4.00	52.26
WM60-H8	60	50	450	4.5	8	30.48	20.62	0.76	4.00	45.64
WM60-H9	60	50	450	4.5	9	34.29	23.22	0.76	4.00	40.65
WM60-H11	60	50	450	4.5	11	41.91	28.37	0.76	4.00	33.23
WM60-H13	60	50	450	4.5	13	49.53	33.53	0.76	4.00	28.13
WM60-H15	60	50	450	4.5	15	57.15	38.68	0.76	4.00	24.36

WM60-H15



PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制。平端请使用“MWF”前缀。

Other materials such as 304 stainless steel and 72A can be customized. Use "MWP" prefix for squared-shim ends.

波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值

What is 平垫圈

A FLAT WASHER?

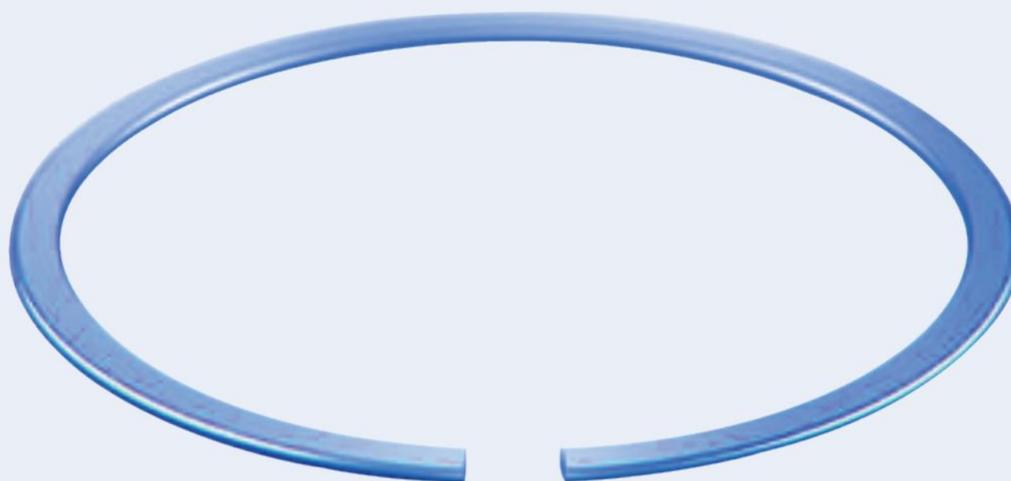
平垫圈和波簧结合起来用于需要靠板的软金属外壳，还用于以皮革、氯丁橡胶或类似材料制成的包装。垫圈可以充当隔圈，以改变波簧的工作高度。增减垫片是调整波簧所承载负荷的出色方法。

Flat washers and wave springs are combined for soft metal shells that require backing plates, and also for packaging made of leather, neoprene or similar materials. The washer can act as a spacer to change the working height of the wave spring. Adding or removing shims is an excellent way to adjust the load carried by the wave spring.



WF系列

平垫圈 Flat Washer Type-WF Series



调节高度



应用广泛



作用明显



WF系列

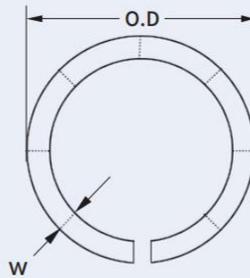
平垫圈 Flat Washer Type-WF Series



WF - 0019

系列名称
Wave Springs Overlap Type

适用直径
(mm)



编号 Mascot	适用直径 Aperture Diameter	范围扩展 External Diameter	厚度 Thickness	径向壁 Radial wall	零件重量/1000件 Part Weight
	mm	mm	mm	mm	KG
WF-0019	19	+0.000/-0.381	0.61	2.36	0.59
WF-0022	22		0.61	2.36	0.70
WF-0025	25		0.61	2.62	0.89
WF-0029	29		0.61	3.51	1.32
WF-0032	32		0.61	3.51	1.49
WF-0035	35	+0.000/-0.508	0.61	3.51	1.66
WF-0038	38		0.61	3.81	1.96
WF-0041	41		0.61	3.81	2.15
WF-0044	44		0.61	3.81	2.33
WF-0048	48		0.61	3.81	2.51
WF-0051	51	+0.000/-0.635	0.61	3.81	2.69
WF-0054	54		0.61	3.81	2.87
WF-0057	57		0.61	4.52	3.05
WF-0060	60		0.61	4.52	3.79
WF-0064	64		0.61	4.52	4.01
WF-0067	67	+0.000/-0.762	0.61	4.52	4.22
WF-0070	70		0.76	4.78	5.83
WF-0073	73		0.76	4.78	6.12
WF-0076	76		0.76	4.78	6.40
WF-0079	79		0.76	5.92	6.69
WF-0083	83	+0.000/-0.889	0.76	5.92	8.51
WF-0086	86		0.76	5.92	8.87
WF-0089	89		0.76	5.92	9.22
WF-0092	92		0.76	5.92	9.57
WF-0095	95		0.76	5.92	9.92
WF-0098	98	+0.000/-0.762	0.76	5.92	10.28
WF-0102	102		0.76	5.92	10.63
WF-0105	105		0.76	5.92	10.98
WF-0108	108		0.76	5.92	11.34
WF-0111	111		0.76	5.92	11.69
WF-0114	114	+0.000/-0.889	0.76	5.92	12.04
WF-0117	117		0.76	5.92	12.39
WF-0121	121		0.76	5.92	12.75
WF-0124	124		0.76	5.92	13.10
WF-0127	127		0.76	5.92	13.45
WF-0130	130	+0.000/-0.889	0.76	5.92	13.80



WF系列

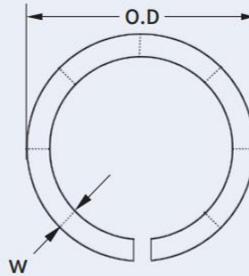
平垫圈 Flat Washer Type-WF Series



WF - 0019

系列名称
Wave Springs Overlap Type

适用直径
(mm)



编号 Mascot	适用直径 Aperture Diameter	范围扩展 External Diameter	厚度 Thickness	径向壁 Radial wall	零件重量/1000件 Part Weight	
	mm	mm	mm	mm	KG	
WF-0133	133	+0.000/-1.524	0.76	5.92	14.16	
WF-0137	137		0.76	5.92	14.51	
WF-0140	140		0.76	5.92	14.86	
WF-0143	143		0.76	5.92	15.21	
WF-0146	146		0.76	5.92	15.57	
WF-0149	149		0.76	5.92	15.92	
WF-0152	152		0.76	5.92	16.27	
WF-0156	156		0.76	5.92	16.63	
WF-0159	159		0.76	5.92	16.98	
WF-0162	162		0.76	5.92	17.33	
WF-0165	165	+0.000/-1.778	0.76	5.92	17.69	
WF-0171	171		0.76	5.92	18.39	
WF-0178	178		0.81	9.53	32.10	
WF-0184	184		0.81	9.53	33.31	
WF-0191	191		0.81	9.53	34.52	
WF-0197	197		0.81	9.53	35.73	
WF-0203	203		0.81	9.53	36.94	
WF-0210	210		0.81	9.53	38.15	
WF-0216	216		0.81	9.53	39.36	
WF-0222	222		0.81	9.53	40.57	
WF-0229	229	+0.000/-2.032	0.81	9.53	41.78	
WF-0241	241		0.81	9.53	44.21	
WF-0254	254		0.81	9.53	46.63	
WF-0267	267		0.81	9.53	49.05	
WF-0279	279		0.81	9.53	51.47	
WF-0292	292		0.81	9.53	53.90	
WF-0305	305		+0.000/-2.286	0.81	9.53	56.32
WF-0318	318			0.81	9.53	58.74
WF-0330	330			0.81	9.53	61.16
WF-0343	343			0.81	9.53	63.58
WF-0356	356	0.81		9.53	66.01	
WF-0368	368	+0.000/-1.143		0.81	9.53	68.43
WF-0381	381			0.81	9.53	70.85
WF-0394	394			0.81	9.53	73.27
WF-0406	406			0.81	9.53	75.70

What is **圆线型** **A WAVE SPRING?**

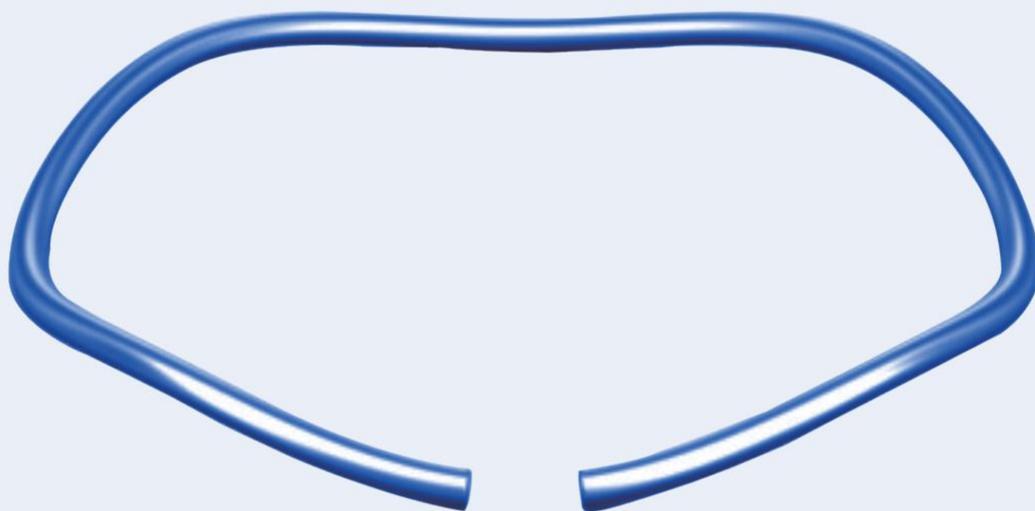
圆线型波簧可产生极高的负荷，且弹簧刚度准确、可预测。它们用于减少或消除预负荷振动，补偿由于组件中的热膨胀引起的松动，或者在需要极高弹力的极其狭窄的径向空间中使用。

The circular wave spring can produce extremely high load, and the spring stiffness is accurate and predictable. They are used to reduce or eliminate preload vibration, compensate for looseness caused by thermal expansion in components, or in extremely narrow radial spaces that require extremely high elasticity.



WR系列

圆线型 Round Wire Type-WR Series



节省空间



极高弹力

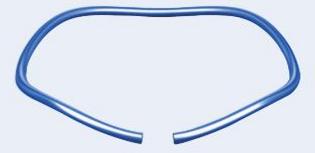


极高负荷



WR系列

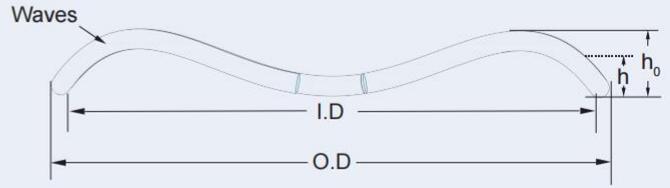
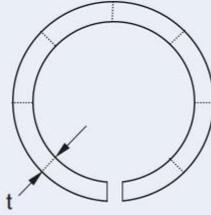
圆线型 Round Wire Type-WR Series



WR - 0013

系列名称
Wave Springs Overlap Type

轴孔直径
(mm)



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	线材直径 Material diameter	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	N/mm
WR-0013	13	10	156	3	1	1.57	1.32	0.79	613
WR-0016	16	13	222	3	1	1.96	1.63	0.97	673
WR-0019	19	16	311	3	1	2.34	1.93	1.14	766
WR-0022	22	19	356	3	1	2.64	2.18	1.30	778
WR-0025	25	22	400	3	1	2.95	2.41	1.42	750
WR-0029	29	25	445	3	1	3.23	2.59	1.52	700
WR-0032	32	27	489	3	1	3.51	2.79	1.65	688
WR-0035	35	31	533	4	1	3.07	2.41	1.42	808
WR-0038	38	34	578	4	1	3.25	2.59	1.52	875
WR-0041	41	37	622	4	1	3.48	2.79	1.65	907
WR-0044	44	40	667	4	1	3.66	2.87	1.70	847
WR-0048	48	43	711	4	1	3.94	3.02	1.78	778
WR-0051	51	46	756	4	1	4.19	3.15	1.83	726
WR-0054	54	48	800	4	1	4.11	3.28	1.93	955
WR-0057	57	51	845	4	1	4.27	3.45	2.03	1039
WR-0060	60	54	889	4	1	4.52	3.58	2.11	946
WR-0064	64	57	934	4	1	4.70	3.66	2.16	896
WR-0067	67	60	978	4	1	5.16	3.89	2.29	770
WR-0070	70	63	1022	4	1	5.38	3.91	2.31	694
WR-0073	73	66	1067	4	1	5.33	4.01	2.36	808
WR-0076	76	70	1111	5	1	4.55	3.58	2.11	1151
WR-0079	79	73	1156	5	1	4.67	3.66	2.16	1138
WR-0083	83	76	1200	5	1	4.83	3.89	2.29	1277
WR-0086	86	79	1245	5	1	4.95	3.91	2.31	1195
WR-0086	89	82	1289	5	1	5.11	4.01	2.36	1180
WR-0092	92	85	1334	5	1	5.23	4.09	2.41	1167
WR-0095	95	88	1378	5	1	5.38	4.22	2.49	1179
WR-0098	98	91	1422	5	1	5.28	4.32	2.54	1474
WR-0102	102	94	1467	5	1	5.72	4.32	2.54	1050

PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制

Other materials such as 304 stainless steel and 72A can be customized

波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值



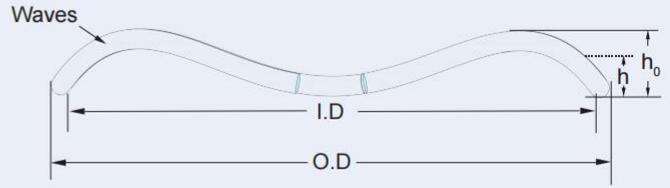
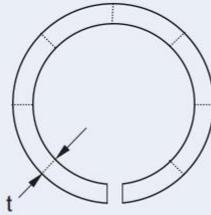
WR系列

圆线型 Round Wire Type-WR Series



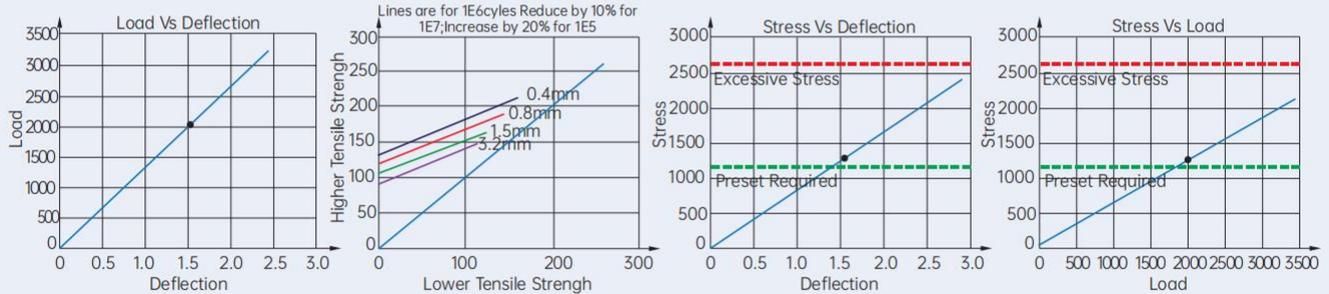
WR - 0013

系列名称 Wave Springs Overlap Type
轴孔直径 (mm)



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	线材直径 Material diameter	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	N/mm
WR-0105	105	97	1489	5	1	5.61	4.45	2.67	1275
WR-0108	108	100	1534	5	1	5.72	4.52	2.67	1285
WR-0111	111	103	1556	5	1	6.10	4.75	2.79	1156
WR-0114	114	106	1600	5	1	6.27	4.75	2.79	1050
WR-0117	117	109	1623	5	1	6.43	4.75	2.79	968
WR-0121	121	113	1667	5	1	6.53	4.83	2.84	979
WR-0124	124	116	1689	5	1	6.71	4.83	2.84	899
WR-0127	127	119	1734	5	1	6.73	4.95	2.95	975
WR-0130	130	121	1778	5	1	6.96	5.08	3.00	946
WR-0135	133	124	1823	5	1	7.09	5.18	3.05	957
WR-0137	137	128	1867	6	1	6.22	4.75	2.79	1267
WR-0140	140	131	1911	6	1	6.38	4.75	2.79	1176
WR-0143	143	134	1956	6	1	6.22	4.83	2.84	1400
WR-0146	146	137	2000	6	1	6.38	4.83	2.84	1291
WR-0149	149	140	2045	6	1	6.65	5.00	2.95	1238
WR-0152	152	143	2089	6	1	6.81	5.08	3.00	1210

WR-0054



PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制

Other materials such as 304 stainless steel and 72A can be customized

波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值

What is 叠型 A WAVE SPRING?

叠型波簧是平行盘绕的多层扁线波形弹簧，可选双层或三层配置。它们可以代替单层波形弹簧的堆叠，从而避免堆叠单个弹簧的错误并减少装配时间。层叠波形弹簧适用于需要中等至重负荷且变形较小的应用。

Stacked wave springs are multi-layer flat-line waveform springs wound in parallel, optionally arranged in two or three layers. They can replace the stacking of single-layer waveform springs, thus avoiding errors in stacking individual springs and reducing assembly time. Stacked waveform springs are suitable for applications requiring moderate to heavy loads and small deformations.



WS系列

叠型 Stacked Wave Springs-WS Series



装配精准



较小变形



中等负荷



WS系列

叠型 Stacked Wave Springs-WS Series



WL

系列名称

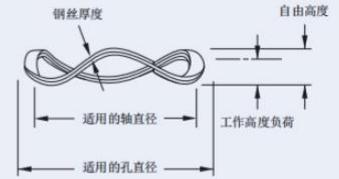
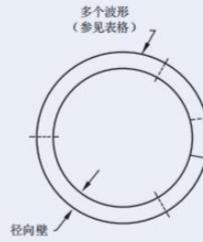
Wave Springs Overlap Type

0016

轴孔直径
(mm)

- 2

圈数



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WS0016-2	16.00	11.46	89.0	3	2	2.46	1.83	0.28	1.52	140
WS0016-3	16.00	11.46	133.5	3	3	3.15	2.08	0.28	1.52	125
WS0019-2	19.00	13.36	106.8	3	2	2.77	1.83	0.28	1.98	114
WS0019-3	19.00	13.36	160.2	3	3	3.18	2.08	0.28	1.98	146
WS0022-2	22.00	15.75	124.6	3	2	3.14	1.88	0.30	2.39	99
WS0022-3	22.00	15.75	186.9	3	3	3.56	2.18	0.30	2.39	136
WS0024-2	24.00	17.02	133.5	3	2	3.56	1.88	0.30	2.39	80
WS0024-3	24.00	17.02	200.3	3	3	3.86	2.18	0.30	2.39	119
WS0026-2	26.00	18.14	142.4	3	2	3.37	2.34	0.36	3.18	138
WS0026-3	26.00	18.14	213.6	3	3	3.73	2.69	0.36	3.18	205
WS0028-2	28.00	20.07	151.3	3	2	3.68	2.34	0.36	3.18	113
WS0028-3	28.00	20.07	227.0	3	3	4.04	2.69	0.36	3.18	168
WS0030-2	30.00	21.87	169.1	3	2	4.24	2.34	0.36	3.18	89
WS0030-3	30.00	21.87	253.7	3	3	4.78	2.69	0.36	3.18	121
WS0032-2	32.00	23.67	178.0	3	2	4.07	2.39	0.41	3.38	106
WS0032-3	32.00	23.67	267.0	3	3	4.48	2.79	0.41	3.38	158
WS0035-2	35.00	26.42	195.8	3	2	4.94	2.39	0.41	3.38	77
WS0035-3	35.00	26.42	293.7	3	3	5.35	2.79	0.41	3.38	115
WS0037-2	37.00	28.65	204.7	3	2	4.72	2.44	0.46	3.38	90
WS0037-3	37.00	28.65	307.1	3	3	5.18	2.90	0.46	3.38	135
WS0040-2	40.00	31.01	222.5	3	2	5.70	2.44	0.46	3.38	68
WS0040-3	40.00	31.01	333.8	3	3	6.15	2.90	0.46	3.38	103
WS0042-2	42.00	33.50	231.4	4	2	3.71	2.44	0.46	3.38	182
WS0042-3	42.00	33.50	347.1	4	3	4.17	2.90	0.46	3.38	273
WS0047-2	47.00	38.18	258.1	4	2	4.52	2.44	0.46	3.38	124
WS0047-3	47.00	38.18	387.2	4	3	4.98	2.90	0.46	3.38	186
WS0052-2	52.00	42.37	284.8	4	2	4.15	2.97	0.61	3.76	241
WS0052-3	52.00	42.37	427.2	4	3	4.76	3.58	0.61	3.76	362
WS0055-2	55.00	45.31	302.6	4	2	4.48	2.97	0.61	3.76	200

PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制

Other materials such as 304 stainless steel and 72A can be customized

波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值



WS系列

叠型 Stacked Wave Springs-WS Series

WL

系列名称

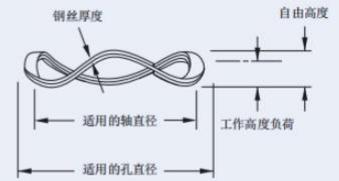
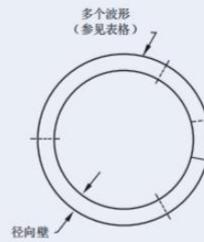
Wave Springs Overlap Type

0016

轴孔直径
(mm)

- 2

圈数



编号 Mascot	轴孔直径 Aperture Diameter	轴直径 External Diameter	负荷 Load	波形数量 Number of waveforms	圈数 Number of turns	自由高度 Free height	工作高度 Working height	厚度 Thickness	径向壁 Radial wall	弹性系数 Spring stiffness
	mm	mm	N			mm	mm	mm	mm	N/mm
WS0055-3	55.00	45.31	453.9	4	3	5.09	3.58	0.61	3.76	301
WS0062-2	62.00	50.65	338.2	4	2	4.93	2.97	0.61	4.52	173
WS0062-3	62.00	50.65	507.3	4	3	5.54	3.58	0.61	4.52	259
WS0068-2	68.00	56.16	373.8	4	2	4.94	3.53	0.76	4.78	265
WS0068-3	68.00	56.16	560.7	4	3	5.70	4.29	0.76	4.78	398
WS0070-2	70.00	58.14	382.7	4	2	5.12	3.53	0.76	4.78	241
WS0070-3	70.00	58.14	574.1	4	3	5.88	4.29	0.76	4.78	361
WS0072-2	72.00	60.07	391.6	4	2	5.32	3.53	0.76	4.78	219
WS0072-3	72.00	60.07	587.4	4	3	6.08	4.29	0.76	4.78	328
WS0075-2	75.00	62.97	409.4	4	2	5.68	3.53	0.76	4.78	190
WS0075-3	75.00	62.97	614.1	4	3	6.44	4.29	0.76	4.78	286
WS0080-2	80.00	67.49	436.1	4	2	6.37	3.53	0.76	4.78	154
WS0080-3	80.00	67.49	654.2	4	3	7.13	4.29	0.76	4.78	230
WS0085-2	85.00	70.26	462.8	4	2	6.29	3.53	0.76	5.92	168
WS0085-3	85.00	70.26	694.2	4	3	7.05	4.29	0.76	5.92	252
WS0090-2	90.00	74.98	498.4	4	2	7.13	3.53	0.76	5.92	138
WS0090-3	90.00	74.98	747.6	4	3	7.89	4.29	0.76	5.92	208
WS0095-2	95.00	79.65	525.1	4	2	8.08	3.53	0.76	5.92	115
WS0095-3	95.00	79.65	787.7	4	3	8.84	4.29	0.76	5.92	173
WS0100-2	100.00	85.42	551.8	5	2	5.27	3.53	0.76	5.92	317
WS0100-3	100.00	85.42	827.7	5	3	6.03	4.29	0.76	5.92	476

PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制

Other materials such as 304 stainless steel and 72A can be customized

波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值

What is **线型** A WAVE SPRING?

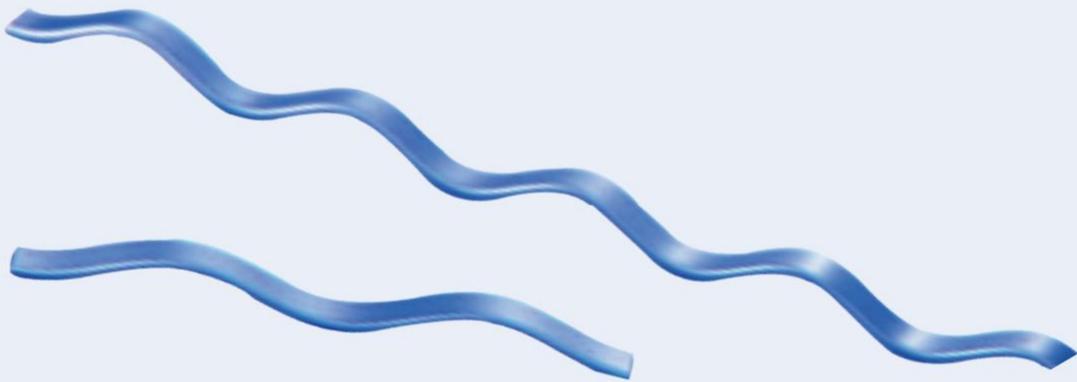
线型波形弹簧是带有额外波形的扁线直弹簧。它们专门用于需要在线性腔体中施加轻至中等负荷和变形的应用，例如机械密封或回转式滑片泵。

Linear wave spring is a flat straight spring with additional wave. They are designed for applications that require light to moderate loads and deformations in linear cavities, such as mechanical seals or rotary vane pumps.



WL系列

线型 Linear Springs-WL Series



作用明显



中等变形



中等负荷



WL系列

线型 Linear Springs-WL Series



WL

系列名称

Wave Springs Overlap Type

03

厚度

(mm)

48

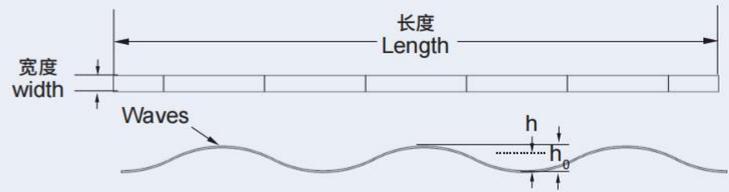
宽度

(mm)

- 1

波形数量

(数量越大, 长度越长)



编号 Mascot	厚度 Thickness	宽度 Width	长度 Length	波形数量 Number of waveforms	自由高度 Free height	工作高度 Working height	负荷 Load	弹性系数 Spring stiffness
	mm	mm	mm		mm	mm	N	N/mm
WL0348-1	0.30	4.78	38.10	1	5.72	3.18	6.67	1.93
WL0348-2	0.30	4.78	76.20	2	5.72	3.18	24.89	15.93
WL0348-3	0.30	4.78	114.30	3	5.72	3.18	46.23	23.80
WL0348-4	0.30	4.78	152.40	4	5.72	3.18	65.79	31.85
WL0364-1	0.30	6.35	38.10	1	5.72	3.18	9.78	2.63
WL0364-2	0.30	6.35	76.20	2	5.72	3.18	34.67	21.18
WL0364-3	0.30	6.35	114.30	3	5.72	3.18	61.79	31.68
WL0364-4	0.30	6.35	152.40	4	5.72	3.18	88.02	42.35
WL0379-1	0.30	7.92	38.10	1	5.72	3.18	12.89	3.33
WL0379-2	0.30	7.92	76.20	2	5.72	3.18	45.34	26.43
WL0379-3	0.30	7.92	114.30	3	5.72	3.18	78.24	39.55
WL0379-4	0.30	7.92	152.40	4	5.72	3.18	115.58	52.85
WL0395-1	0.30	9.53	38.10	1	5.72	3.18	15.56	4.03
WL0395-2	0.30	9.53	76.20	2	5.72	3.18	50.23	31.68
WL0395-3	0.30	9.53	114.30	3	5.72	3.18	89.35	47.60
WL0395-4	0.30	9.53	152.40	4	5.72	3.18	112.02	63.35
WL0548-1	0.51	4.78	47.63	1	6.35	3.81	13.34	4.73
WL0548-2	0.51	4.78	95.25	2	6.35	3.81	50.68	37.63
WL0548-3	0.51	4.78	142.88	3	6.35	3.81	104.46	56.53
WL0548-4	0.51	4.78	190.50	4	6.35	3.81	144.47	75.43
WL0564-1	0.51	6.35	47.63	1	6.35	3.81	24.89	6.30
WL0564-2	0.51	6.35	95.25	2	6.35	3.81	78.24	50.05
WL0564-3	0.51	6.35	142.88	3	6.35	3.81	140.92	75.25
WL0564-4	0.51	6.35	190.50	4	6.35	3.81	199.59	100.28
WL0579-1	0.51	7.92	47.63	1	6.35	3.81	26.67	7.88
WL0579-2	0.51	7.92	95.25	2	6.35	3.81	91.13	62.48
WL0579-3	0.51	7.92	142.88	3	6.35	3.81	155.14	93.80

PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制

Other materials such as 304 stainless steel and 72A can be customized

波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值



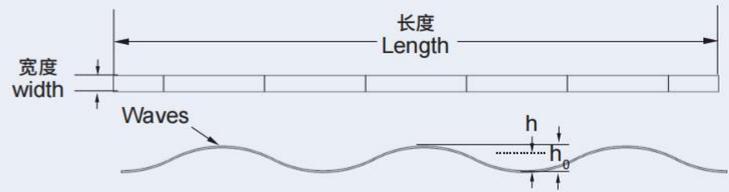
WL系列

线型 Linear Springs-WL Series



WL **03** **48** - **1**

系列名称 厚度 宽度 波形数量
Wave Springs Overlap Type (mm) (mm) (数量越大, 长度越长)



编号 Mascot	厚度 Thickness	宽度 Width	长度 Length	波形数量 Number of waveforms	自由高度 Free height	工作高度 Working height	负荷 Load	弹性系数 Spring stiffness
	mm	mm	mm		mm	mm	N	N/mm
WL0579-4	0.51	7.92	190.50	4	6.35	3.81	225.82	125.13
WL0595-1	0.51	9.53	47.63	1	6.35	3.81	28.45	9.45
WL0595-2	0.51	9.53	95.25	2	6.35	3.81	103.58	75.25
WL0595-3	0.51	9.53	142.88	3	6.35	3.81	231.16	112.70
WL0595-4	0.51	9.53	190.50	4	6.35	3.81	331.17	150.33
WL0648-1	0.64	4.78	57.15	1	6.99	4.45	15.56	5.25
WL0648-2	0.64	4.78	114.30	2	6.99	4.45	68.46	42.53
WL0648-3	0.64	4.78	171.45	3	6.99	4.45	124.02	63.88
WL0648-4	0.64	4.78	228.60	4	6.99	4.45	188.93	85.23
WL0664-1	0.64	6.35	57.15	1	6.99	4.45	28.89	7.00
WL0664-2	0.64	6.35	114.30	2	6.99	4.45	96.46	56.70
WL0664-3	0.64	6.35	171.45	3	6.99	4.45	154.25	85.05
WL0664-4	0.64	6.35	228.60	4	6.99	4.45	224.49	113.23
WL0679-1	0.64	7.92	57.15	1	6.99	4.45	29.34	8.93
WL0679-2	0.64	7.92	114.30	2	6.99	4.45	106.69	70.70
WL0679-3	0.64	7.92	171.45	3	6.99	4.45	192.04	106.05
WL0679-4	0.64	7.92	228.60	4	6.99	4.45	275.61	141.40
WL0695-1	0.64	9.53	57.15	1	6.99	4.45	34.23	10.68
WL0695-2	0.64	9.53	114.30	2	6.99	4.45	130.69	85.05
WL0695-3	0.64	9.53	171.45	3	6.99	4.45	239.16	127.40
WL0695-4	0.64	9.53	228.60	4	6.99	4.45	341.84	169.93
WL1048-1	0.97	4.78	66.68	1	7.62	5.08	33.34	11.73
WL1048-2	0.97	4.78	133.35	2	7.62	5.08	111.13	94.15
WL1048-3	0.97	4.78	200.03	3	7.62	5.08	271.16	141.40
WL1048-4	0.97	4.78	266.70	4	7.62	5.08	400.08	188.48
WL1064-1	0.97	6.35	66.68	1	7.62	5.08	52.90	15.58
WL1064-2	0.97	6.35	133.35	2	7.62	5.08	203.15	125.30

PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制

Other materials such as 304 stainless steel and 72A can be customized

波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值



WL系列

线型 Linear Springs-WL Series



WL

系列名称

Wave Springs Overlap Type

03

厚度

(mm)

48

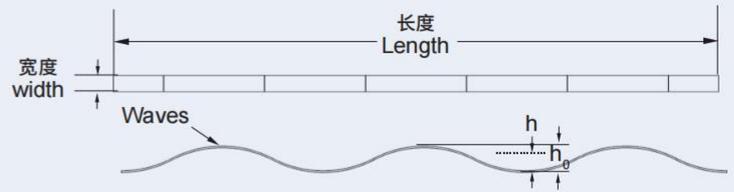
宽度

(mm)

- 1

波形数量

(数量越大, 长度越长)



编号 Mascot	厚度 Thickness	宽度 Width	长度 Length	波形数量 Number of waveforms	自由高度 Free height	工作高度 Working height	负荷 Load	弹性系数 Spring stiffness
	mm	mm	mm		mm	mm	N	N/mm
WL1064-3	0.97	6.35	200.03	3	7.62	5.08	330.29	187.95
WL1064-4	0.97	6.35	266.70	4	7.62	5.08	495.65	250.60
WL1079-1	0.97	7.92	66.68	1	7.62	5.08	44.01	19.60
WL1079-2	0.97	7.92	133.35	2	7.62	5.08	219.15	156.28
WL1079-3	0.97	7.92	200.03	3	7.62	5.08	391.19	234.50
WL1079-4	0.97	7.92	266.70	4	7.62	5.08	714.36	312.73
WL1095-1	0.97	9.53	66.68	1	7.62	5.08	75.13	23.45
WL1095-2	0.97	9.53	133.35	2	7.62	5.08	274.28	187.95
WL1095-3	0.97	9.53	200.03	3	7.62	5.08	466.76	281.93
WL1095-4	0.97	9.53	266.70	4	7.62	5.08	680.13	375.90
WL1148-1	1.14	4.78	76.20	1	8.26	5.72	40.01	13.13
WL1148-2	1.14	4.78	152.40	2	8.26	5.72	160.03	104.83
WL1148-3	1.14	4.78	228.60	3	8.26	5.72	288.94	157.15
WL1148-4	1.14	4.78	304.80	4	8.26	5.72	395.63	209.65
WL1164-1	1.14	6.35	76.20	1	8.26	5.72	55.57	17.50
WL1164-2	1.14	6.35	152.40	2	8.26	5.72	188.93	139.48
WL1164-3	1.14	6.35	228.60	3	8.26	5.72	368.96	209.13
WL1164-4	1.14	6.35	304.80	4	8.26	5.72	535.66	278.78
WL1179-1	1.14	7.92	76.20	1	8.26	5.72	65.35	21.70
WL1179-2	1.14	7.92	152.40	2	8.26	5.72	268.05	173.95
WL1179-3	1.14	7.92	228.60	3	8.26	5.72	484.09	260.93
WL1179-4	1.14	7.92	304.80	4	8.26	5.72	582.33	347.90
WL1195-1	1.14	9.53	76.20	1	8.26	5.72	90.68	26.08
WL1195-2	1.14	9.53	152.40	2	8.26	5.72	324.95	209.13
WL1195-3	1.14	9.53	228.60	3	8.26	5.72	593.45	313.60
WL1195-4	1.14	9.53	304.80	4	8.26	5.72	844.61	418.25
WL1648-1	1.57	4.78	85.73	1	8.89	6.35	63.57	24.15

PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制

Other materials such as 304 stainless steel and 72A can be customized

波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值



WL系列

线型 Linear Springs-WL Series



WL

系列名称

Wave Springs Overlap Type

03

厚度

(mm)

48

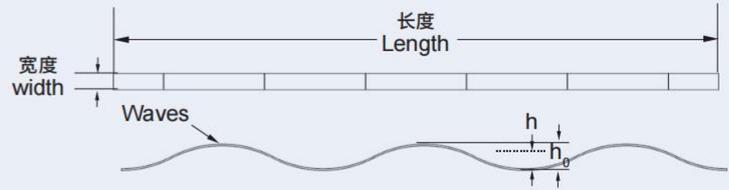
宽度

(mm)

- 1

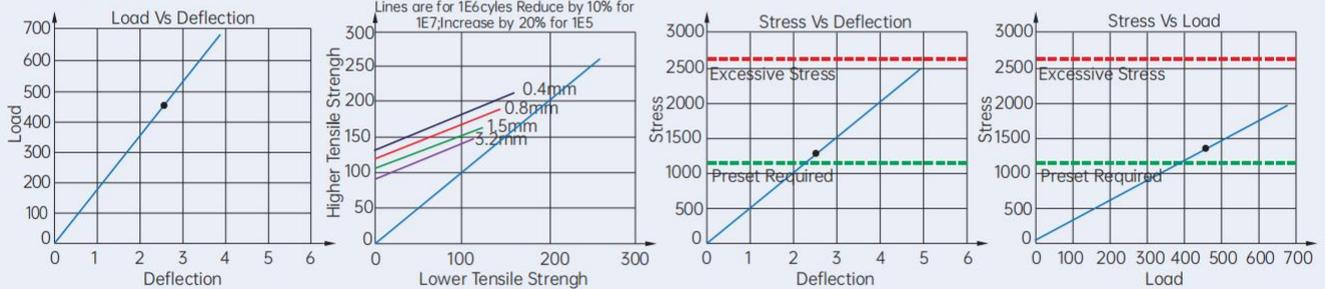
波形数量

(数量越大, 长度越长)



编号 Mascot	厚度 Thickness	宽度 Width	长度 Length	波形数量 Number of waveforms	自由高度 Free height	工作高度 Working height	负荷 Load	弹性系数 Spring stiffness
	mm	mm	mm		mm	mm	N	N/mm
WL1648-2	1.57	4.78	171.45	2	8.89	6.35	300.06	192.50
WL1648-3	1.57	4.78	257.18	3	8.89	6.35	468.98	288.75
WL1648-4	1.57	4.78	304.80	4	8.89	6.35	709.03	385.00
WL1664-1	1.57	6.35	85.73	1	8.89	6.35	100.02	32.03
WL1664-2	1.57	6.35	171.45	2	8.89	6.35	462.31	256.03
WL1664-3	1.57	6.35	257.18	3	8.89	6.35	715.69	384.13
WL1664-4	1.57	6.35	304.80	4	8.89	6.35	1040.20	512.05
WL1679-1	1.57	7.92	85.73	1	8.89	6.35	123.58	39.90
WL1679-2	1.57	7.92	171.45	2	8.89	6.35	462.31	319.55
WL1679-3	1.57	7.92	257.18	3	8.89	6.35	775.70	479.33
WL1679-4	1.57	7.92	304.80	4	8.89	6.35	1166.89	639.10
WL1695-1	1.57	9.53	85.73	1	8.89	6.35	186.70	47.95
WL1695-2	1.57	9.53	171.45	2	8.89	6.35	620.12	384.13
WL1695-3	1.57	9.53	257.18	3	8.89	6.35	1066.87	576.10
WL1695-4	1.57	9.53	304.80	4	8.89	6.35	1569.19	768.08

WL1679-2



PS:材料Material: PH17-7 其他材料如304不锈钢、72A等可定制

Other materials such as 304 stainless steel and 72A can be customized

波形弹簧与轴孔直径外壳紧密贴合 自由高度为参考值 弹性系数为理论值

What is 侧波型 A WAVE SPRING?

侧波形弹簧为波形弹簧重要品类，由扁平金属带材连续弯折而成，波浪结构沿轴向分布，单层一体成型。具备空间利用率高、装配便捷、弹性稳定、减震降噪、轻量化等优势，适用于空间紧凑、中等载荷、允许一定变形的工况。

Side wave springs are a key category of wave springs, formed by continuous bending of flat metal strips with a wave structure distributed axially and manufactured as a one-piece single layer. They feature high space utilization, easy assembly, stable elasticity, vibration and noise reduction, and lightweight design, making them suitable for working conditions with compact spaces, medium loads and allowance for a certain amount of deformation.



WE系列

侧波型 Side Linear Springs-WE Series




作用明显

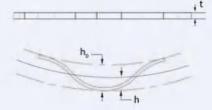
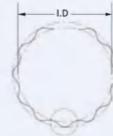

较小变形


中等负荷



WE系列

侧波型 Side Linear Springs-WE Series



编号 No.	轴直径 Shaft Diameter I.D		负荷 Load		工作高度 Work Height (h)		自由高度 Free Height (h ₀)		波形 数量 No. of Waves	厚度 Thickness (t)		宽度 Width (w)		弹性系数 Spring Rate		材料Material: PH17-7 其他材料如304不锈 钢、72A等可定制 Other materials such as 304 stainless steel and 72A can be customized
	英制 (in)	公制 (mm)	英制 磅(lb)	公制 牛(N)	英制 (in)	公制 (mm)	英制 (in)	公制 (mm)		英制 (in)	公制 (mm)	英制 (in)	公制 (mm)	英制 (lb/in)	公制 (N/mm)	
WE012-1	0.464	12	0.6	3	0.138	3.5	0.197	5	1	0.016	0.4	0.114	2.9	10	2	
WE014-2	0.536	14	1.2	5	0.138	3.5	0.197	5	2	0.016	0.4	0.114	2.9	20	4	
WE017-3	0.656	17	1.7	8	0.138	3.5	0.197	5	3	0.016	0.4	0.114	2.9	30	5	
WE020-4	0.789	20	2.3	10	0.138	3.5	0.197	5	4	0.016	0.4	0.114	2.9	40	7	
WE024-5	0.928	24	2.9	13	0.138	3.5	0.197	5	5	0.016	0.4	0.114	2.9	50	9	
WE027-6	1.069	27	3.5	15	0.138	3.5	0.197	5	6	0.016	0.4	0.114	2.9	60	11	
WE031-7	1.212	31	4.0	18	0.138	3.5	0.197	5	7	0.016	0.4	0.114	2.9	71	12	
WE034-8	1.356	34	4.6	20	0.138	3.5	0.197	5	8	0.016	0.4	0.114	2.9	81	14	
WE038-9	1.501	38	5.2	23	0.138	3.5	0.197	5	9	0.016	0.4	0.114	2.9	91	16	
WE042-10	1.646	42	5.8	26	0.138	3.5	0.197	5	10	0.016	0.4	0.114	2.9	101	18	
WE046-11	1.792	46	6.3	28	0.138	3.5	0.197	5	11	0.016	0.4	0.114	2.9	111	19	
WE016-12	0.618	16	5.6	25	0.138	3.5	0.197	5	1	0.024	0.6	0.134	3.4	94	17	
WE018-13	0.714	18	11.1	50	0.138	3.5	0.197	5	2	0.024	0.6	0.134	3.4	189	33	
WE022-14	0.874	22	16.7	74	0.138	3.5	0.197	5	3	0.024	0.6	0.134	3.4	283	50	
WE027-15	1.052	27	22.3	99	0.138	3.5	0.197	5	4	0.024	0.6	0.134	3.4	378	66	
WE031-16	1.236	31	27.9	124	0.138	3.5	0.197	5	5	0.024	0.6	0.134	3.4	472	83	
WE036-17	1.425	36	33.4	149	0.138	3.5	0.197	5	6	0.024	0.6	0.134	3.4	566	99	
WE041-18	1.615	41	39.0	173	0.138	3.5	0.197	5	7	0.024	0.6	0.134	3.4	661	116	
WE046-19	1.807	46	44.6	198	0.138	3.5	0.197	5	8	0.024	0.6	0.134	3.4	755	132	
WE051-20	2.000	51	50.2	223	0.138	3.5	0.197	5	9	0.024	0.6	0.134	3.4	850	149	
WE056-21	2.194	56	55.7	248	0.138	3.5	0.197	5	10	0.024	0.6	0.134	3.4	944	165	
WE061-22	2.388	61	61.3	273	0.138	3.5	0.197	5	11	0.024	0.6	0.134	3.4	1038	182	
WE023-23	0.917	23	18.2	81	0.138	3.5	0.197	5	1	0.024	0.6	0.134	3.4	309	54	
WE027-24	1.059	27	36.4	162	0.138	3.5	0.197	5	2	0.024	0.6	0.134	3.4	617	108	
WE033-25	1.297	33	54.7	243	0.138	3.5	0.197	5	3	0.024	0.6	0.134	3.4	926	162	
WE040-26	1.561	40	72.9	324	0.138	3.5	0.197	5	4	0.024	0.6	0.134	3.4	1234	216	
WE047-27	1.835	47	91.1	405	0.138	3.5	0.197	5	5	0.024	0.6	0.134	3.4	1543	270	
WE054-28	2.114	54	109.3	486	0.138	3.5	0.197	5	6	0.024	0.6	0.134	3.4	1851	324	
WE061-29	2.397	61	127.6	567	0.138	3.5	0.197	5	7	0.024	0.6	0.134	3.4	2160	378	
WE068-30	2.682	68	145.8	648	0.138	3.5	0.197	5	8	0.024	0.6	0.134	3.4	2469	432	
WE075-31	2.969	75	164.0	729	0.138	3.5	0.197	5	9	0.024	0.6	0.134	3.4	2777	486	
WE083-32	3.256	83	182.2	810	0.138	3.5	0.197	5	10	0.024	0.6	0.134	3.4	3086	540	
WE090-33	3.544	90	200.4	891	0.138	3.5	0.197	5	11	0.024	0.6	0.134	3.4	3394	594	
WE030-34	1.181	30	19.7	88	0.138	3.5	0.197	5	1	0.030	0.75	0.158	4.0	334	58	
WE035-35	1.364	35	40.8	181	0.138	3.5	0.197	5	2	0.030	0.75	0.158	4.0	668	117	
WE042-36	1.670	42	61.1	272	0.138	3.5	0.197	5	3	0.030	0.75	0.158	4.0	1002	175	
WE051-37	2.009	51	81.5	362	0.138	3.5	0.197	5	4	0.030	0.75	0.158	4.0	1335	234	
WE060-38	2.362	60	101.9	453	0.138	3.5	0.197	5	5	0.030	0.75	0.158	4.0	1669	292	
WE069-39	2.722	69	122.3	544	0.138	3.5	0.197	5	6	0.030	0.75	0.158	4.0	2003	351	
WE078-40	3.086	78	142.7	634	0.138	3.5	0.197	5	7	0.030	0.75	0.158	4.0	2337	409	
WE088-41	3.453	88	163.0	725	0.138	3.5	0.197	5	8	0.030	0.75	0.158	4.0	2671	467	
WE097-42	3.822	97	183.4	815	0.138	3.5	0.197	5	9	0.030	0.75	0.158	4.0	3005	526	
WE106-43	4.192	106	203.8	906	0.138	3.5	0.197	5	10	0.030	0.75	0.158	4.0	3338	584	
WE116-44	4.563	116	224.2	997	0.138	3.5	0.197	5	11	0.030	0.75	0.158	4.0	3672	643	
WE031-45	1.206	31	21.9	97	0.138	3.5	0.197	5	1	0.030	0.75	0.187	4.8	371	65	
WE035-46	1.392	35	45.3	202	0.138	3.5	0.197	5	2	0.030	0.75	0.187	4.8	743	130	
WE043-47	1.705	43	68.0	302	0.138	3.5	0.197	5	3	0.030	0.75	0.187	4.8	1114	195	
WE052-48	2.052	52	90.7	403	0.138	3.5	0.197	5	4	0.030	0.75	0.187	4.8	1486	260	
WE061-49	2.412	61	113.4	504	0.138	3.5	0.197	5	5	0.030	0.75	0.187	4.8	1857	325	
WE071-50	2.779	71	136.0	605	0.138	3.5	0.197	5	6	0.030	0.75	0.187	4.8	2228	390	
WE080-51	3.151	80	158.7	706	0.138	3.5	0.197	5	7	0.030	0.75	0.187	4.8	2600	455	
WE090-52	3.526	90	181.4	806	0.138	3.5	0.197	5	8	0.030	0.75	0.187	4.8	2971	520	
WE099-53	3.902	99	204.1	907	0.138	3.5	0.197	5	9	0.030	0.75	0.187	4.8	3343	585	
WE109-54	4.280	109	226.7	1008	0.138	3.5	0.197	5	10	0.030	0.75	0.187	4.8	3714	650	
WE118-55	4.659	118	249.4	1109	0.138	3.5	0.197	5	11	0.030	0.75	0.187	4.8	4085	715	
WE039-56	1.549	39	7.8	35	0.138	3.5	0.197	5	1	0.024	0.62	0.250	6.4	132	23	
WE045-57	1.789	45	16.1	72	0.138	3.5	0.197	5	2	0.024	0.62	0.250	6.4	264	46	
WE056-58	2.191	56	24.2	108	0.138	3.5	0.197	5	3	0.024	0.62	0.250	6.4	397	69	
WE067-59	2.636	67	32.3	144	0.138	3.5	0.197	5	4	0.024	0.62	0.250	6.4	529	93	
WE079-60	3.098	79	40.4	179	0.138	3.5	0.197	5	5	0.024	0.62	0.250	6.4	661	116	
WE091-61	3.571	91	48.4	215	0.138	3.5	0.197	5	6	0.024	0.62	0.250	6.4	793	139	
WE103-62	4.048	103	56.5	251	0.138	3.5	0.197	5	7	0.024	0.62	0.250	6.4	926	162	
WE115-63	4.530	115	64.6	287	0.138	3.5	0.197	5	8	0.024	0.62	0.250	6.4	1058	185	
WE127-64	5.013	127	72.6	323	0.138	3.5	0.197	5	9	0.024	0.62	0.250	6.4	1190	208	
WE140-65	5.499	140	80.7	359	0.138	3.5	0.197	5	10	0.024	0.62	0.250	6.4	1322	231	
WE152-66	5.986	152	88.8	395	0.138	3.5	0.197	5	11	0.024	0.62	0.250	6.4	1454	255	

内径I.D
WED12-1
 波形扩张件
 Wave form
 expansion piece

What is 闭口波簧 A WAVE SPRING?

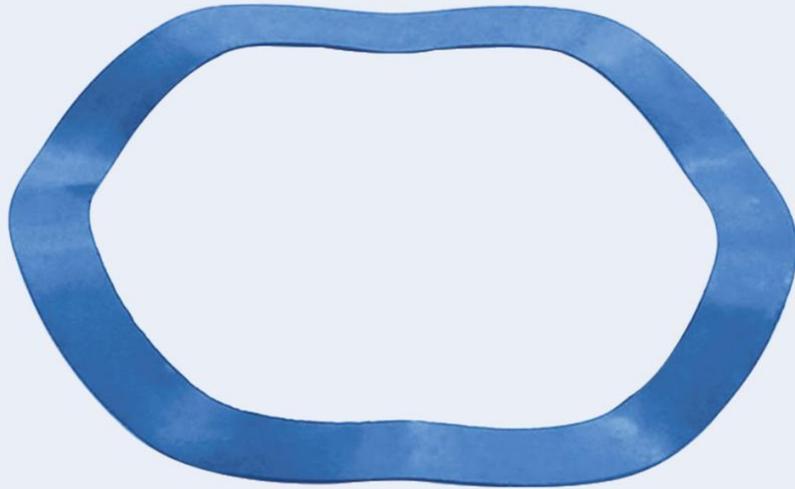
闭口波簧为一体成型环形结构，波峰波谷闭合无间隙，有单圈、双圈叠合、多圈层叠多种配置，可直接替代传统开口波簧加垫片的组合。其闭合设计消除了开口弹簧装配易错位、窜动的问题，闭口波簧适用于中至重负荷工况。

The closed wave spring is an integrally formed annular structure with closed crests and troughs without gaps, available in single-turn, double-turn stacked or multi-turn stacked configurations, and can directly replace the combination of traditional open wave springs and gaskets. Its closed design eliminates the problems of misalignment and movement of open springs during assembly. Closed wave springs are suitable for medium to heavy load working conditions.



DC系列

闭口波簧 Common Single Layer Closed Wave Springs



作用明显



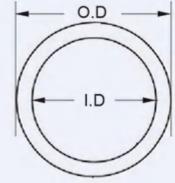
中等变形



中等负荷



WD系列



国标JB/T 7590-2005 单层闭口波簧（冲压型）

JB/T 7590-2005 Single Layer Closed Wave Springs

编号 No.	外径 Outside Diameter (O.D)		外径公差 Outside Diameter Tolerance (O.D TOL)		内径 Inside Diameter (I.D)		内径公差 Inside Diameter Tolerance (I.D TOL)		自由高度 Free Height (h ₀)		厚度 Thickness (t)		波形 数量 No. of Waves	M级 Fmin/N		M级 Fmin/N	
	英制 (in)	公制 (mm)	英制 (in)	公制 (mm)	英制 (in)	公制 (mm)	英制 (in)	公制 (mm)	英制 (in)	公制 (mm)	英制 (in)	公制 (mm)		英制 (lb)	公制 (N)	英制 (lb)	公制 (N)
D16	0.606	15.4	±0.016	±0.40	0.461	11.7	±0.016	±0.40	0.012	0.3	0.012	0.3	3	11	50	25	110
D19	0.732	18.6	±0.016	±0.40	0.579	14.7	±0.016	±0.40	0.012	0.3	0.012	0.3	3	13	60	27	120
D22	0.843	21.4	±0.016	±0.40	0.602	15.3	±0.016	±0.40	0.012	0.3	0.012	0.3	3	13	60	36	160
D26	0.984	25.0	±0.016	±0.40	0.736	18.7	±0.016	±0.40	0.012	0.3	0.012	0.3	3	18	80	40	180
D28	1.071	27.2	±0.016	±0.40	0.819	20.8	±0.016	±0.40	0.012	0.3	0.012	0.3	3	18	80	45	200
D30	1.142	29.0	±0.024	±0.60	0.890	22.6	±0.024	±0.60	0.020	0.5	0.020	0.5	3	20	90	52	230
D32	1.236	31.4	±0.024	±0.60	1.047	26.6	±0.024	±0.60	0.020	0.5	0.020	0.5	3	25	110	56	250
D35	1.339	34.0	±0.024	±0.60	1.094	27.8	±0.024	±0.60	0.020	0.5	0.020	0.5	3	31	140	63	280
D40	1.520	38.6	±0.024	±0.60	1.291	32.8	±0.024	±0.60	0.020	0.5	0.020	0.5	4	36	160	67	300
D42	1.598	40.6	±0.024	±0.60	1.343	34.1	±0.024	±0.60	0.020	0.5	0.020	0.5	4	40	180	72	320
D47	1.791	45.5	±0.024	±0.60	1.512	38.4	±0.024	±0.60	0.020	0.5	0.020	0.5	4	45	200	76	340
D52	1.988	50.5	±0.024	±0.60	1.614	41.0	±0.024	±0.60	0.020	0.5	0.020	0.5	5	47	210	79	350
D62	2.370	60.2	±0.024	±0.60	1.976	50.2	±0.024	±0.60	0.020	0.5	0.020	0.5	5	58	260	90	400
D72	2.720	69.1	±0.031	±0.80	2.327	59.1	±0.031	±0.80	0.020	0.5	0.020	0.5	5	70	310	106	470
D80	3.071	78.0	±0.031	±0.80	2.756	70.0	±0.031	±0.80	0.024	0.6	0.024	0.6	6	81	360	117	520
D85	3.272	83.1	±0.031	±0.80	2.878	73.1	±0.031	±0.80	0.024	0.6	0.024	0.6	6	88	390	124	550
D90	3.449	87.6	±0.031	±0.80	3.075	78.1	±0.031	±0.80	0.024	0.6	0.024	0.6	6	94	420	130	580
D10	3.819	97.0	±0.031	±0.80	3.445	87.5	±0.031	±0.80	0.024	0.6	0.024	0.6	6	99	440	139	620
D110	4.224	107.3	±0.031	±0.80	3.843	97.6	±0.031	±0.80	0.024	0.6	0.024	0.6	7	106	470	146	650
D120	4.583	116.4	±0.031	±0.80	4.213	107.0	±0.031	±0.80	0.024	0.6	0.024	0.6	7	108	480	148	660
D125	4.756	120.8	±0.031	±0.80	4.394	111.6	±0.031	±0.80	0.024	0.6	0.024	0.6	7	108	480	148	660
D130	5.059	128.5	±0.031	±0.80	4.311	109.5	±0.031	±0.80	0.031	0.8	0.031	0.8	6	110	490	151	670
D140	5.453	138.5	±0.039	±1.00	4.717	119.8	±0.039	±1.00	0.035	0.9	0.035	0.9	6	110	490	151	670
D150	5.858	148.8	±0.039	±1.00	4.937	125.4	±0.039	±1.00	0.035	0.9	0.035	0.9	6	112	500	157	700
D160	6.264	159.1	±0.039	±1.00	5.398	137.1	±0.039	±1.00	0.039	1.0	0.039	1.0	6	117	520	162	720
D170	6.654	169.0	±0.039	±1.00	5.591	142.0	±0.039	±1.00	0.039	1.0	0.039	1.0	6	119	530	169	750
D180	7.051	179.1	±0.039	±1.00	5.713	145.1	±0.039	±1.00	0.039	1.0	0.039	1.0	6	133	590	191	850
D190	7.382	187.5	±0.047	±1.20	6.083	154.5	±0.047	±1.20	0.047	1.2	0.047	1.2	6	173	770	232	1030
D200	7.776	197.5	±0.047	±1.20	6.555	166.5	±0.047	±1.20	0.047	1.2	0.047	1.2	6	191	850	250	1110
D215	8.346	212.0	±0.047	±1.20	7.165	182.0	±0.047	±1.20	0.055	1.4	0.055	1.4	6	306	1360	373	1660
D240	9.331	237.0	±0.047	±1.20	8.031	204.0	±0.047	±1.20	0.055	1.4	0.055	1.4	6	317	1410	389	1730





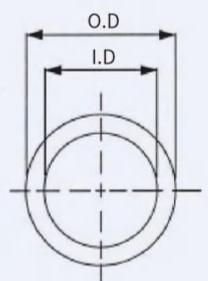
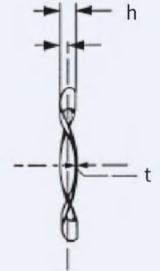
DC系列

普通单层闭口波簧 (冲压型)

Common Single Layer Closed Wave Springs



编号 No.	外径 Outside Diameter (O.D)		内径 Inside Diameter (I.D)		厚度 Thickness (t)		自由高度 Free Height (h)		工作高度 Work Height (h ₁)		载荷 Load	
	英制 (in)	公制 (mm)	英制 (in)	公制 (mm)	英制 (in)	公制 (mm)	英制 (in)	公制 (mm)	英制 (in)	公制 (mm)	英制磅 (lb)	公制牛 (N)
DC5	0.183	4.7	0.134	3.4	0.004	0.1	0.023	0.6	0.012	0.3	0.25-0.5	1.1-2.2
DC6	0.242	6.2	0.194	4.9	0.006	0.1	0.030	0.8	0.015	0.4	0.5-1	2.2-4.4
DC8	0.305	7.8	0.243	6.2	0.007	0.2	0.030	0.8	0.015	0.4	0.5-1	2.2-4.4
DC9	0.367	9.3	0.265	6.7	0.006	0.2	0.030	0.8	0.015	0.4	2-4	9-18
DC12	0.484	12.3	0.397	10.1	0.009	0.2	0.029	0.7	0.020	0.5	3-5	13-22
DC13	0.492	12.5	0.350	8.9	0.007	0.2	0.035	0.9	0.020	0.5	3-5	13-22
DC15	0.608	15.4	0.459	11.7	0.008	0.2	0.037	0.9	0.025	0.6	3-5	13-22
DC16	0.618	15.7	0.440	11.2	0.008	0.2	0.040	1.0	0.025	0.6	3-5	13-22
DC18	0.731	18.6	0.588	14.9	0.009	0.2	0.047	1.2	0.030	0.8	3-5	13-22
DC19	0.734	18.6	0.531	13.5	0.009	0.2	0.050	1.3	0.030	0.8	4-7	18-31
DC22	0.855	21.7	0.650	16.5	0.010	0.3	0.060	1.5	0.030	0.8	4-7	18-31
DC24	0.925	23.5	0.719	18.3	0.010	0.3	0.066	1.7	0.033	0.8	6-9	27-40
DC26	1.004	25.5	0.780	19.8	0.011	0.3	0.071	1.8	0.035	0.9	7-10	31-45
DC27	1.080	27.4	0.839	21.3	0.012	0.3	0.073	1.9	0.036	0.9	8-12	36-53
DC28	1.102	28.0	0.856	21.7	0.012	0.3	0.075	1.9	0.037	0.9	9-13	40-58
DC29	1.159	29.4	0.901	22.9	0.013	0.3	0.080	2.0	0.040	1.0	10-14	44-62
DC31	1.235	31.4	0.961	24.4	0.014	0.4	0.087	2.2	0.043	1.1	12-18	53-80
DC34	1.351	34.3	1.051	26.7	0.015	0.4	0.099	2.5	0.049	1.2	15-21	67-93
DC38	1.543	39.2	1.201	30.5	0.017	0.4	0.105	2.7	0.052	1.3	17-25	76-111
DC39	1.543	39.2	1.201	30.5	0.020	0.5	0.125	3.2	0.062	1.6	25-37	111-165
DC40	1.593	40.5	1.239	31.5	0.018	0.5	0.110	2.8	0.055	1.4	20-28	89-125
DC41	1.621	41.2	1.261	32.0	0.019	0.5	0.112	2.8	0.056	1.4	21-30	93-133
DC46	1.819	46.2	1.404	35.7	0.020	0.5	0.125	3.2	0.062	1.6	25-35	111-156
DC52	2.028	51.5	1.575	40.0	0.022	0.6	0.140	3.6	0.069	1.8	29-41	129-182
DC54	2.132	54.2	1.658	42.1	0.023	0.6	0.148	3.8	0.073	1.9	31-45	138-200
DC61	2.420	61.5	1.872	47.6	0.025	0.6	0.168	4.3	0.082	2.1	37-53	165-236
DC67	2.645	67.2	2.057	52.3	0.028	0.7	0.184	4.7	0.090	2.3	47-67	209-298
DC72	2.816	71.5	2.200	55.9	0.030	0.8	0.197	5.0	0.097	2.5	53-77	236-343
DC79	3.118	79.2	2.420	61.5	0.035	0.9	0.207	5.3	0.104	2.6	72-104	320-463
DC85	3.328	84.5	2.603	66.1	0.036	0.9	0.227	5.8	0.112	2.8	74-106	329-472
DC89	3.519	89.4	2.740	69.6	0.038	1.0	0.234	5.9	0.116	3.0	82-118	365-525
DC99	3.917	99.5	3.047	77.4	0.042	1.1	0.258	6.6	0.128	3.3	98-142	436-632
DC109	4.300	109.2	3.370	85.6	0.045	1.1	0.302	7.7	0.148	3.8	115-165	512-734
DC118	4.627	117.5	3.612	91.7	0.047	1.2	0.334	8.5	0.162	4.1	130-188	578-836
DC127	4.997	126.9	3.890	98.8	0.050	1.3	0.355	9.0	0.172	4.4	145-209	645-930
DC137	5.408	137.4	4.208	106.9	0.053	1.4	0.388	9.9	0.187	4.8	162-232	721-1032
DC148	5.817	147.8	4.530	115.1	0.055	1.4	0.440	11.2	0.209	5.3	178-256	792-1139
DC157	6.173	156.8	4.803	122.0	0.058	1.5	0.463	11.8	0.220	5.6	196-282	872-1254
DC166	6.550	166.4	5.120	130.1	0.061	1.6	0.496	12.6	0.235	6.0	209-301	930-1339
DC176	6.945	176.4	5.408	137.4	0.063	1.6	0.538	13.7	0.253	6.4	231-333	1028-1481
DC186	7.325	186.1	5.672	144.1	0.065	1.7	0.575	14.6	0.269	6.8	250-360	1112-1601





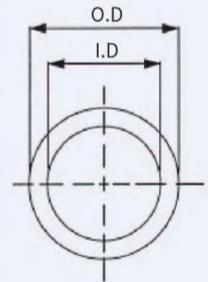
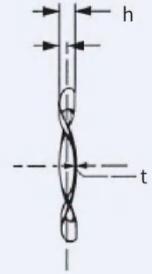
DCP系列

压缩型单层闭口波簧 (冲压型)

Compression Type Single Layer Closed Wave Springs



编号 No.	外径 Outside Diameter (O.D)		内径 Inside Diameter (I.D)		厚度 Thickness (t)		自由高度 Free Height (h)		弹性系数 Rate		载荷 Load		波数 No. of Waves
	英制 (in)	公制 (mm)	英制 (in)	公制 (mm)	英制 (in)	公制 (mm)	英制 (in)	公制 (mm)	英制 (in)	公制 (mm)	英制磅 (lb)	公制牛 (N)	
DCP10-1	0.386	10	0.244	6.2	0.008	0.2	0.047	1.20	137	23.9	5.4	23.9	3
DCP12-2	0.472	12	0.283	7.2	0.008	0.2	0.055	1.40	728	127.5	44.1	196.1	3
DCP16-3	0.622	16	0.413	10.5	0.006	0.2	0.053	1.40	728	127.5	37.5	166.7	3
DCP16-4	0.622	16	0.413	10.5	0.012	0.3	0.059	1.50	1316	230.5	77.2	343.2	3
DCP17-5	0.669	17	0.472	12.0	0.012	0.3	0.059	1.50	672	117.7	35.3	156.9	3
DCP19-6	0.740	19	0.520	13.2	0.008	0.2	0.063	1.60	364	63.7	55.1	245.2	3
DCP19-7	0.740	19	0.449	11.4	0.012	0.3	0.063	1.60	1680	294.2	110.3	490.3	3
DCP22-8	0.858	22	0.622	15.8	0.008	0.2	0.098	2.50	168	29.4	88.2	392.3	3
DCP24-10	0.858	22	0.622	15.8	0.010	0.3	0.118	3.00	168	29.4	33.1	147.1	3
DCP26-11	0.858	22	0.551	14.0	0.012	0.3	0.063	1.60	840	147.1	77.2	343.2	3
DCP28-13	0.937	24	0.689	17.5	0.008	0.2	0.067	1.70	196	34.3	26.5	117.7	3
DCP28-14	0.937	24	0.689	17.5	0.012	0.3	0.067	1.70	560	98.1	40.8	181.4	3
DCP30-15	1.016	26	0.760	19.3	0.012	0.3	0.067	1.70	448	78.5	39.7	176.5	3
DCP30-16	1.016	26	0.760	19.3	0.020	0.5	0.067	1.70	1680	294.2	101.4	451.1	3
DCP30-17	1.094	28	0.827	21.0	0.012	0.3	0.067	1.70	308	53.9	24.3	107.9	3
DCP31-19	1.094	28	0.827	21.0	0.020	0.5	0.067	1.70	1680	294.2	121.3	539.4	3
DCP32-20	1.169	30	0.886	22.5	0.008	0.2	0.067	1.70	95	16.7	8.8	39.2	3
DCP32-21	1.169	30	0.886	22.5	0.012	0.3	0.071	1.80	308	53.9	28.7	127.5	3
DCP32-22	1.169	30	0.886	22.5	0.016	0.4	0.063	1.60	1092	191.2	58.4	259.9	3
DCP32-23	1.169	30	0.886	22.5	0.020	0.5	0.079	2.00	1316	230.5	125.7	559.0	3
DCP35-24	1.220	31	1.043	26.5	0.012	0.3	0.106	2.70	140	24.5	33.1	147.1	3
DCP35-25	1.220	31	1.043	26.5	0.016	0.4	0.079	2.00	280	49.0	46.3	205.9	3
DCP35-26	1.248	32	0.965	24.5	0.014	0.4	0.087	2.20	308	53.9	57.3	255.0	3
DCP37-27	1.248	32	1.043	26.5	0.016	0.4	0.079	2.00	252	44.1	37.5	166.7	3
DCP39-28	1.248	32	1.043	26.5	0.020	0.5	0.094	2.40	560	98.1	86.0	382.5	3
DCP40-29	1.252	32	0.906	23.0	0.012	0.3	0.138	3.50	308	53.9	48.5	215.7	3
DCP40-30	1.358	35	1.102	28.0	0.016	0.4	0.118	3.00	336	58.8	121.3	539.4	3
DCP41-32	1.358	35	0.965	24.5	0.020	0.5	0.098	2.50	3360	588.4	264.6	1176.8	4
DCP47-34	1.374	35	0.984	25.0	0.012	0.3	0.079	2.00	952	166.7	86.0	382.5	4
DCP47-35	1.437	37	1.189	30.2	0.012	0.3	0.098	2.50	308	53.9	33.1	147.1	4
DCP51-36	1.437	37	1.189	30.2	0.020	0.5	0.098	2.50	840	147.1	110.3	490.3	4
DCP51-37	1.539	39	1.299	33.0	0.016	0.4	0.106	2.70	616	107.9	77.2	343.2	4
DCP52-38	1.539	39	1.299	33.0	0.020	0.5	0.118	3.00	896	156.9	143.3	637.4	4
DCP57-40	1.567	40	1.311	33.3	0.012	0.3	0.118	3.00	252	44.1	50.7	225.6	4
DCP61-41	1.567	40	1.181	30.0	0.016	0.4	0.197	5.00	280	49.0	97.0	431.5	3
DCP61-42	1.575	40	1.181	30.0	0.020	0.5	0.118	3.00	1176	205.9	152.1	676.7	4
DCP62-43	1.614	41	1.358	34.5	0.014	0.4	0.118	3.00	336	58.8	57.3	255.0	4
DCP71-45	1.772	45	1.457	37.0	0.020	0.5	0.118	3.00	840	147.1	143.3	637.4	4
DCP71-46	1.831	47	1.575	40.0	0.016	0.4	0.118	3.00	392	68.6	75.0	333.4	4
DCP75-47	1.831	47	1.575	40.0	0.020	0.5	0.118	3.00	784	137.3	121.3	539.4	4





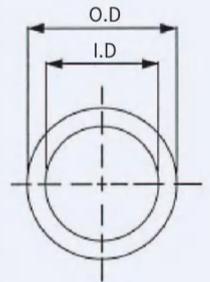
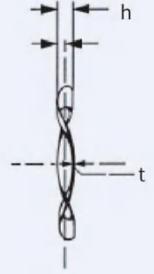
DCP系列

压缩型单层闭口波簧 (冲压型)

Compression Type Single Layer Closed Wave Springs



编号 No.	外径 Outside Diameter (O.D)		内径 Inside Diameter (I.D)		厚度 Thickness (t)		自由高度 Free Height (h)		弹性系数 Rate		载荷 Load		波数 No. of Waves
	英制 (in)	公制 (mm)	英制 (in)	公制 (mm)	英制 (in)	公制 (mm)	英制 (in)	公制 (mm)	英制 (in)	公制 (mm)	英制磅 (lb)	公制牛 (N)	
DCP79-48	1.846	47	1.457	37.0	0.020	0.5	0.079	2.00	1344	235.4	189.6	843.4	4
DCP79-49	2.008	51	1.654	42.0	0.016	0.4	0.138	3.50	756	132.4	157.7	701.2	4
DCP84-51	2.008	51	1.654	42.0	0.020	0.5	0.138	3.50	1204	210.8	286.7	1274.9	5
DCP89-53	2.039	52	1.614	41.0	0.016	0.4	0.079	2.00	476	83.4	40.8	181.4	4
DCP99-55	2.039	52	1.614	41.0	0.020	0.5	0.079	2.00	728	127.5	50.7	225.6	4
DCP99-56	2.157	55	1.846	46.9	0.020	0.5	0.079	2.00	280	49.0	72.8	323.6	4
DCP109-58	2.244	57	1.890	48.0	0.020	0.5	0.138	3.50	896	156.9	110.3	490.3	4
DCP109-59	2.402	61	2.008	51.0	0.016	0.4	0.138	3.50	728	127.5	83.8	372.7	4
DCP109-60	2.402	61	2.008	51.0	0.020	0.5	0.138	3.50	1792	313.8	209.5	931.6	5
DCP119-62	2.402	61	2.008	51.0	0.024	0.6	0.138	3.50	1792	313.8	286.7	1274.9	5
DCP125-63	2.437	62	1.969	50.0	0.020	0.5	0.157	4.00	784	137.3	253.6	1127.8	4
DCP129-64	2.476	63	2.134	54.2	0.016	0.4	0.146	3.70	336	58.8	77.2	343.2	4
DCP139-65	2.657	68	2.165	55.0	0.024	0.6	0.157	4.00	840	147.1	147.7	657.0	4
DCP149-66	2.795	71	2.402	61.0	0.016	0.4	0.138	3.50	476	83.4	72.8	323.6	5
DCP169-68	2.795	71	2.402	61.0	0.020	0.5	0.138	3.50	700	122.6	125.7	559.0	5
DCP72-69	2.795	71	2.402	61.0	0.031	0.8	0.157	4.00	2912	509.9	385.9	1716.2	5
DCP72-70	2.827	72	2.283	58.0	0.024	0.6	0.157	4.00	952	166.7	154.4	686.5	4
DCP75-71	2.945	75	2.598	66.0	0.024	0.6	0.157	4.00	420	73.5	77.2	343.2	4
DCP80-72	3.110	79	2.795	71.0	0.020	0.5	0.138	3.50	392	68.6	57.3	255.0	5
DCP80-73	3.110	79	2.795	71.0	0.024	0.6	0.138	3.50	1512	264.8	194.0	863.0	6
DCP80-74	3.110	79	2.795	71.0	0.031	0.8	0.157	4.00	2912	509.9	385.9	1716.2	6
DCP80-75	3.142	80	2.520	64.0	0.028	0.7	0.157	4.00	1456	255.0	220.5	980.7	4
DCP85-76	3.307	84	2.913	74.0	0.020	0.5	0.142	3.60	420	73.5	72.8	323.6	5
DCP85-77	3.307	84	2.913	74.0	0.024	0.6	0.138	3.50	1596	279.5	242.6	1078.7	6
DCP90-78	3.504	89	3.110	79.0	0.020	0.5	0.138	3.50	896	156.9	121.3	539.4	6
DCP90-79	3.504	89	3.110	79.0	0.024	0.6	0.138	3.50	1400	245.2	172.0	764.9	6
DCP90-80	3.535	90	2.835	72.0	0.031	0.8	0.157	4.00	1904	333.4	297.7	1323.9	4
DCP100-81	3.898	99	3.504	89.0	0.020	0.5	0.157	4.00	560	98.1	101.4	451.1	6
DCP100-82	3.898	99	3.504	89.0	0.024	0.6	0.138	3.50	1120	196.1	145.5	647.2	6
DCP100-83	3.929	100	3.228	82.0	0.035	0.9	0.157	4.00	1960	343.2	242.6	1078.7	4
DCP110-84	4.291	109	3.898	99.0	0.020	0.5	0.177	4.50	840	147.1	143.3	637.4	7
DCP110-85	4.291	109	3.898	99.0	0.024	0.6	0.177	4.50	1316	230.5	258.0	1147.4	7
DCP110-86	4.291	109	3.898	99.0	0.028	0.7	0.177	4.50	1848	323.6	374.9	1667.1	7
DCP110-87	4.291	109	3.543	90.0	0.039	1.0	0.157	4.00	1260	220.6	275.6	1225.8	4
DCP120-88	4.685	119	4.094	104.0	0.031	0.8	0.157	4.00	2744	480.5	385.9	1716.2	6
DCP125-89	4.921	125	4.291	109.0	0.031	0.8	0.157	4.00	2520	441.3	330.8	1471.0	6
DCP130-90	5.079	129	4.331	110.0	0.031	0.8	0.157	4.00	2520	441.3	330.8	1471.0	6
DCP140-91	5.472	139	4.764	121.0	0.035	0.9	0.157	4.00	2408	421.7	352.8	1569.1	6
DCP150-92	5.866	149	4.961	126.0	0.035	0.9	0.157	4.00	2800	490.3	330.8	1471.0	6
DCP160-93	6.260	159	5.394	137.0	0.039	1.0	0.157	4.00	2296	402.1	363.8	1618.1	6
DCP170-94	6.654	169	5.787	147.0	0.039	1.0	0.157	4.00	3248	568.8	385.9	1716.2	6



上一章节：波形弹簧

WAVE SPRING

核心定位：精密弹性支撑 · 轴向载荷适配

核心价值：小空间大变形 · 高刚度低高度 · 耐疲劳长寿命

适配场景：密封系统 / 液压元件 / 精密设备 / 汽车零部件

下一章节：挡圈

RETAINING RING

核心定位：快速轴向定位 · 可靠锁紧固定

核心价值：安装便捷 · 规格齐全 · 抗松脱 · 适配多工况

适配场景：轴承装配 / 齿轮箱 / 工程机械 / 通用机械



螺旋挡圈



扁线挡圈



波形挡圈



等截面挡圈



多层密封挡圈



定制挡圈

What is 挡圈

A RETAINING RING?

弹性挡圈没有凸耳，不会与组件中的其他部分互相干扰。挡圈由扁线卷绕而成。这种独特的工艺生产出没有耳状凸出或毛边的卡扣挡圈，从而不会干扰到组件中的其他部分。

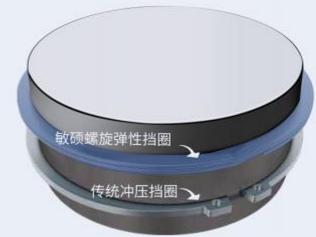
Retaining Rings have No Ears to Interfere in your assembly! Spirolox Rings are manufactured by coiling the ring from flat wire. This unique process produces a retaining ring that has no protruding ears or burrs to interfere with your assembly.

APPLICATION

挡圈应用

卷绕工艺生产挡圈没有废料,挡圈能够经济地以碳素钢、不锈钢、铜和许多其他合金为材料进行生产。我们提供 6000 多种标准挡圈, 备有碳素钢和不锈钢材质的现货。如果需要定制设计, 可以利用无模具成本制造工艺: 完善应对大批量产品、原型和流程设计中期变动。无论何种应用, 我们都可以提供具有成本效益和创新的设计解决方案。

There is no waste in the production of circlips by the winding process, and the circlips can be economically produced from carbon steel, stainless steel, copper and many other alloys. We provide more than 6000 kinds of standard retaining rings, with carbon steel and stainless steel in stock. If you need customized design, you can use the manufacturing process without mold cost: improve and deal with the medium-term changes of mass products, prototypes and process design. No matter what application, we can provide cost-effective and innovative design solutions.



航空航天



精密机械



液压密封



高端电机



无间隙

NO GAP

无间隙 - 360° 阻挡表面
没有与配套组件互相干扰的凸耳

No gap - 360 ° blocking surface
No lugs that interfere with mating components



低成本

LOW COST

卷绕工艺不会产生废料, 可以经济地以不锈钢材料生产
使用无模具成本工艺处理定制的设计

The winding process will not produce waste materials, and can be economically produced from stainless steel materials
Process customized designs using cost free tooling



易安装

EASY INSTALLATION

可以方便地安装和拆除
节省人力成本与时间成本, 大大提高工作效率

It can be easily installed and removed
Save labor cost and time cost, and greatly improve work efficiency

HOW TO INSTALL 如何安装



MANUAL INSTALLATION

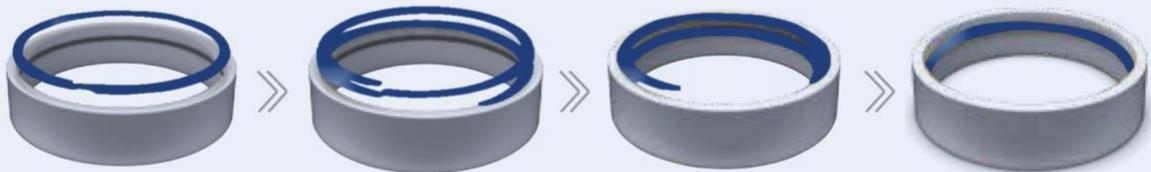
手工安装

个别生产或小批量生产基础上的手动安装实现如下:

将挡圈的线圈分离，并将挡圈的一端插入凹槽。沿圆周按压挡圈，直到整个挡圈都插入凹槽。

Manual installation on an individual or low production basis is accomplished as follows
Separate the ring coils and insert one end of the ring into the groove. Wind the ring by pressing down around the circumference until the entire ring is inserted into the groove.

● 内挡圈安装方法



● 外挡圈安装方法



SEMI-AUTOMATED AND AUTOMATED INSTALLATION

半自动化与自动化安装

如要进行速度更高以及自动化的组装工作，则可以设计简单的工具或组装夹具。可以使用顶杆和锥形栓执行在轴外部的安装。锥形栓的角度大约为 6 度，在轴端上居中。松散适配的顶杆将挡圈推入锥形栓上的适当位置。通常，杠杆式冲床或气缸常用来自动完成这个装配操作。

For higher speed and automated assembly operations, simple tooling or assembly fixtures can be designed. External installation on a shaft can be accomplished with a plunger and tapered plug. The plug, angled at approximately 6 degrees, is centered over the shaft end. A loose fitting plunger pushes the ring into position over the tapered plug. An arbor press or air cylinder is commonly used to automate this assembly operation.

● 内挡圈安装方法



挡圈在内部的安装也可以用类似的方法进行。使用锥形轴引导挡圈收缩，并使用顶杆将挡圈推送就位。用于安装挡圈的工具应该具有硬化的工作表面，以减少磨损。

Internal retaining ring installation is accomplished in a similar manner. A tapered bore, which acts as a ring contracting guide, and a plunger pushes the retaining ring into position. Tooling for ring installation should have hardened working surfaces to minimize wear.

● 内挡圈安装方法

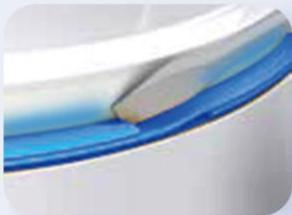


REMOVAL

拆除

挡圈在提供时带有拆卸槽口，以便将其从凹槽中轻松取出。提供的槽口用于在挡圈端与轴或外壳之间形成微小间隙，允许钝器物体插入到挡圈端，以沿着径向向外撬起自由端。

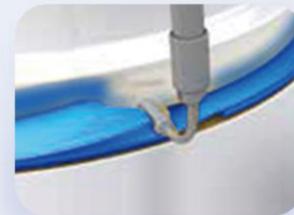
Retaining Rings are supplied standard with removal notches to enable easy extraction from a groove. The notch is provided to form a small gap between the ring end and the shaft or housing, permitting a blunt object to be inserted at the end of the ring to pry the free end out radially and up.



将螺丝刀或牙刮匙插入拆卸槽口后方
Insert a screwdriver or tooth scraper behind the removal notch.



使用工具将挡圈的第一个端头撬出
Use a tool to pry out the first end of the retaining ring.



手动旋转挡圈，直到其从凹槽中脱出
Manually rotate the retaining ring until it comes out of the groove.



MASCOT'S TOOLS

MASCOT的工具

Mascot挡圈拆卸工具,可放在多圈挡圈的各层之间，以便接触拆卸槽口。工具的端部开槽，以便槽口的尖端通过。插入后，便可径向向上拉出挡圈的端头。

The mascot retaining ring removal tool can be placed between the layers of the multi ring retaining ring to access the removal notch. The end of the tool is slotted so that the tip of the notch passes through. After insertion, the end of the retaining ring can be pulled up radially.

What is 螺旋型 A RETAINING RING?

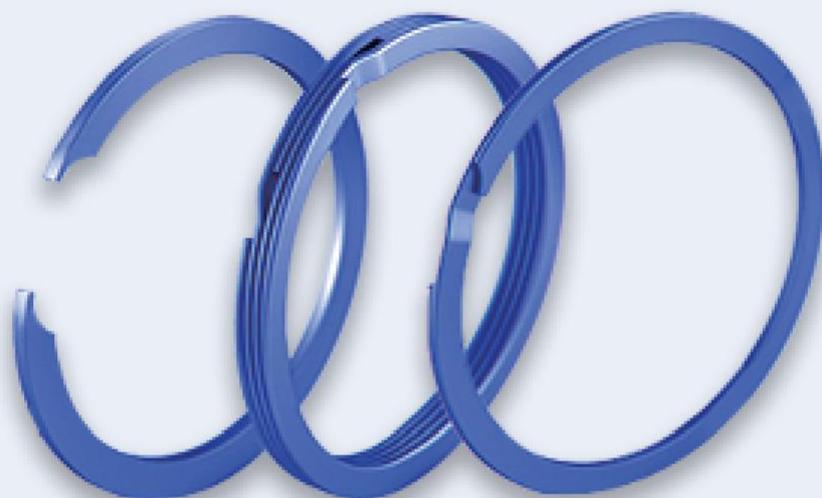
我们提供几千多种标准挡圈，备有碳素钢和不锈钢材质的现货。如果需要定制设计，可以利用无模具成本制造工艺：无论何种应用，我们都可提供具有成本效益和创新的设计解决方案。

We provide more than thousands of standard retaining rings, with carbon steel and stainless steel in stock. If you need custom design, you can use the cost-free manufacturing process: no matter what the application, we can provide cost-effective and innovative design solutions.



RL系列

螺旋内挡圈-轻负荷 Spiral Inner Retaining Ring



没有凸耳



种类多样



自由定制



RL系列

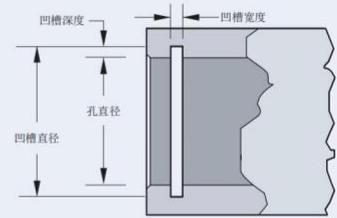
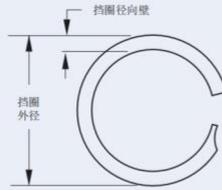
螺旋内挡圈-轻负荷 Spiral Inner Retaining Ring



RL - 0016

系列名称
Overlap Type

孔直径
(mm)



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RL-0006	6	6.35	0.51	0.30	6.30	0.38	439	1988
RL-0007	7	7.38	0.51	0.30	7.32	0.38	546	2320
RL-0008	8	8.44	0.64	0.38	8.36	0.46	702	3183
RL-0009	9	9.54	0.76	0.38	9.46	0.46	1003	3580
RL-0010	10	10.58	0.76	0.38	10.50	0.46	1238	3978
RL-0011	11	11.68	0.89	0.38	11.60	0.46	1634	4388
RL-0012	12	12.74	0.89	0.38	12.66	0.46	1930	4774
RL-0013	13	13.80	1.14	0.46	13.72	0.56	2281	6261
RL-0014	14	14.80	1.14	0.46	14.72	0.56	2456	6742
RL-0015	15	15.80	1.14	0.46	15.72	0.56	2632	7224
RL-0016	16	16.80	1.14	0.46	16.72	0.56	2807	7705
RL-0017	17	17.82	1.14	0.46	17.72	0.56	2983	8187
RL-0018	18	18.82	1.14	0.46	18.72	0.56	3158	8669
RL-0019	19	19.86	1.14	0.46	19.76	0.56	3519	9150
RL-0020	20	21.26	1.65	0.53	21.06	0.66	5166	11097
RL-0021	21	22.27	1.65	0.53	22.06	0.66	5424	11652
RL-0022	22	23.28	1.65	0.53	23.06	0.66	5683	12207
RL-0024	24	25.29	1.65	0.53	25.06	0.66	6199	13317
RL-0025	25	26.30	1.65	0.53	26.06	0.66	6458	13872
RL-0026	26	27.31	1.65	0.53	27.06	0.66	6716	14427
RL-0028	28	29.40	2.24	0.64	29.12	0.79	7642	16303
RL-0029	29	30.41	2.24	0.64	30.12	0.79	7915	16885
RL-0030	30	31.42	2.24	0.64	31.12	0.79	8188	17467
RL-0031	31	32.43	2.24	0.64	32.12	0.79	8461	18049
RL-0032	32	33.44	2.24	0.64	33.12	0.79	8734	18632
RL-0034	34	35.45	2.24	0.64	35.12	0.79	9279	19796
RL-0035	35	36.47	2.24	0.64	36.12	0.79	9552	20378

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材

您想要的各材料, 各规格挡圈, 我们都可为您定做, 详情请咨询客户顾问



RL系列

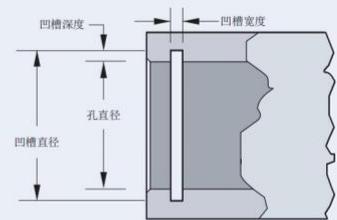
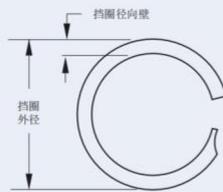
螺旋内挡圈-轻负荷 Spiral Inner Retaining Ring



RL - 0016

系列名称
Wave Springs Overlap Type

孔直径
(mm)



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RL-0036	36	37.48	2.24	0.64	37.12	0.79	9825	20960
RL-0037	37	38.49	2.24	0.64	38.12	0.79	10098	21543
RL-0038	38	39.50	2.24	0.64	39.12	0.79	10371	22125
RL-0040	40	41.94	3.00	0.79	41.48	0.99	14426	28748
RL-0042	42	43.96	3.00	0.79	43.48	0.99	15147	30185
RL-0045	45	46.99	3.00	0.79	46.48	0.99	16229	32341
RL-0047	47	49.00	3.00	0.79	48.48	0.99	16950	33779
RL-0048	48	50.01	3.00	0.79	49.48	0.99	17311	34497
RL-0050	50	52.04	3.00	0.79	51.48	0.99	18032	35935
RL-0052	52	54.55	4.01	0.79	53.94	0.99	24583	37372
RL-0055	55	57.57	4.01	0.79	56.94	0.99	26001	39528
RL-0056	56	58.58	4.01	0.79	57.94	0.99	26473	40247
RL-0058	58	60.60	4.01	0.79	59.94	0.99	27419	41684
RL-0060	60	62.64	4.01	0.79	61.94	0.99	28364	43122
RL-0062	62	64.67	4.01	0.79	63.94	0.99	29310	44559
RL-0063	63	65.69	4.01	0.79	64.94	0.99	29783	45278
RL-0065	65	67.70	4.01	0.79	66.94	0.99	30728	46715
RL-0068	68	70.72	4.01	0.79	69.94	0.99	32146	48871
RL-0070	70	72.74	4.01	0.79	71.94	0.99	33092	50309
RL-0072	72	74.77	4.01	0.79	73.94	0.99	34037	51746
RL-0075	75	77.80	4.01	0.79	76.94	0.99	35456	53902
RL-0078	78	81.20	4.78	0.99	80.34	1.12	44477	70250
RL-0080	80	83.23	4.78	0.99	82.34	1.12	45617	72052
RL-0082	82	85.25	4.78	0.99	84.34	1.12	46757	73853
RL-0085	85	88.29	4.78	0.99	87.34	1.12	48468	76555
RL-0088	88	91.32	4.78	0.99	90.34	1.12	50179	79257
RL-0090	90	93.36	4.78	0.99	92.34	1.12	51319	81058

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RL系列

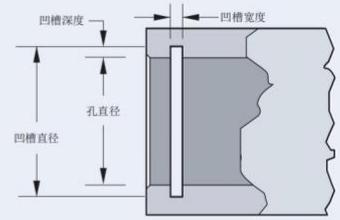
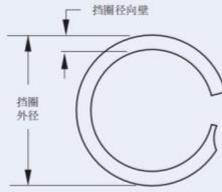
螺旋内挡圈-轻负荷 Spiral Inner Retaining Ring



RL - 0016

系列名称
Wave Springs Overlap Type

孔直径
(mm)



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RL-0092	92	95.37	4.78	0.99	94.34	1.12	52460	82859
RL-0095	95	98.39	4.78	0.99	97.34	1.12	54170	85561
RL-0098	98	101.41	4.78	0.99	100.34	1.12	55881	88263
RL-0100	100	103.43	4.78	0.99	102.34	1.12	57021	90064
RL-0102	102	105.44	4.78	0.99	104.34	1.12	58162	91866
RL-0105	105	108.92	5.72	1.17	107.80	1.32	71642	106440
RL-0110	110	113.98	5.72	1.17	112.80	1.32	75054	111508
RL-0112	112	116.01	5.72	1.17	114.80	1.32	76418	113536
RL-0115	115	119.12	5.72	1.17	117.88	1.32	80707	116577
RL-0120	120	124.30	5.72	1.17	123.00	1.32	87725	121645
RL-0125	125	129.47	5.72	1.17	128.12	1.32	95036	126714
RL-0130	130	134.66	5.72	1.17	133.26	1.32	103272	131783
RL-0135	135	139.83	5.72	1.55	138.38	1.70	111192	181299
RL-0140	140	145.00	5.72	1.55	143.50	1.70	119404	188013
RL-0145	145	150.17	5.72	1.55	148.62	1.70	127974	194907
RL-0150	150	155.30	6.73	1.55	153.76	1.70	137436	201443
RL-0155	155	160.46	6.73	1.55	158.88	1.70	146361	208158
RL-0160	160	165.64	6.73	1.55	164.00	1.70	155956	214872
RL-0165	165	170.82	6.73	1.55	169.13	1.70	165855	221587
RL-0170	170	175.99	6.73	1.55	174.25	1.70	176059	228302
RL-0175	175	181.17	6.73	1.55	179.38	1.70	186568	235017
RL-0180	180	186.35	6.73	1.55	184.50	1.70	197381	241731
RL-0185	185	191.52	6.73	1.55	189.63	1.70	208499	248446
RL-0190	190	196.70	6.73	1.55	194.75	1.70	219922	255161
RL-0195	195	201.87	7.62	1.55	199.88	1.70	231649	261876
RL-0200	200	207.05	7.62	1.55	205.00	1.70	243681	268590
RL-0210	210	217.40	7.62	1.55	215.25	1.70	268658	282020

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RL系列

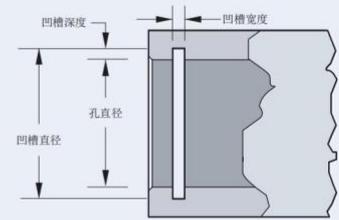
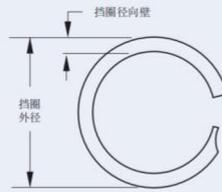
螺旋内挡圈-轻负荷 Spiral Inner Retaining Ring



RL - 0016

系列名称
Wave Springs Overlap Type

孔直径
(mm)



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RL-0220	220	227.76	8.76	1.93	225.50	2.08	294854	367882
RL-0230	230	238.11	8.76	1.93	235.75	2.08	322268	384604
RL-0240	240	248.46	8.76	1.93	246.00	2.08	350900	401326
RL-0250	250	258.81	8.76	1.93	256.25	2.08	380751	418048
RL-0260	260	269.17	9.65	1.93	266.50	2.08	411821	434770
RL-0270	270	279.52	9.65	1.93	276.75	2.08	444108	451492
RL-0280	280	289.87	9.65	1.93	287.00	2.08	477614	468214
RL-0290	290	300.22	9.65	1.93	297.25	2.08	512339	484936
RL-0300	300	310.58	9.65	1.93	307.50	2.08	548282	501658

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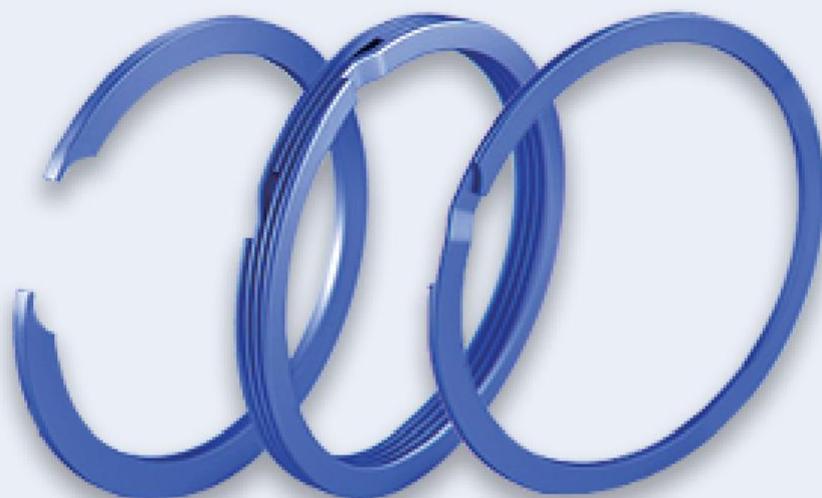
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RM系列

螺旋内挡圈-中负荷 Spiral Inner Retaining Ring



没有凸耳



种类多样



自由定制



RM系列

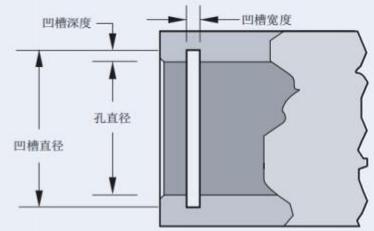
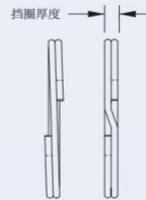
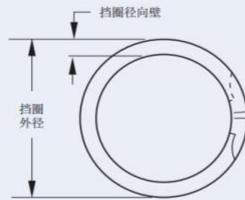
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RM - 0016

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Overlap Type

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(mm)



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	mm	mm	mm	mm	mm	mm	N	N
RM-0013	12.70	13.513	1.143	0.635	13.360	0.762	2047	8900
RM-0014	14.27	15.088	1.143	0.635	14.935	0.762	2314	10013
RM-0015	15.09	15.900	1.143	0.635	15.723	0.762	2448	10591
RM-0016	15.88	16.713	1.143	0.635	16.535	0.762	2537	11125
RM-0017	16.66	17.526	1.143	0.635	17.323	0.762	2670	11704
RM-0018	18.24	19.075	1.143	0.635	18.898	0.762	2937	12772
RM-0019	19.05	20.066	1.651	0.787	19.863	0.914	3783	14952
RM-0020	19.74	20.752	1.651	0.787	20.523	0.914	3916	15486
RM-0021	20.62	21.666	1.651	0.787	21.412	0.914	4094	16198
RM-0022	22.00	23.190	1.651	0.787	22.936	0.914	5162	17266
RM-0023	23.01	24.105	1.651	0.787	23.851	0.914	5429	18067
RM-0024	23.83	25.044	1.651	0.787	24.765	0.914	5607	18690
RM-0025	24.59	26.035	1.905	0.940	25.781	1.067	6408	23051
RM-0026	25.98	27.381	1.905	0.940	27.076	1.067	6764	24342
RM-0027	26.97	28.372	1.905	0.940	28.042	1.067	7031	25276
RM-0028	27.76	29.134	1.905	0.940	28.829	1.067	7209	25988
RM-0029	28.58	29.972	1.905	0.940	29.642	1.067	7432	26789
RM-0030	30.18	31.725	2.159	1.092	31.394	1.219	8989	32841
RM-0031	30.94	32.461	2.159	1.092	32.156	1.219	9212	33687
RM-0032	31.75	33.325	2.159	1.092	32.969	1.219	9434	34577
RM-0033	32.54	34.087	2.159	1.092	33.757	1.219	9657	35422
RM-0034	34.11	35.763	2.159	1.092	35.433	1.219	10992	37158
RM-0035	34.93	36.627	2.413	1.092	36.246	1.219	11259	38003
RM-0036	35.71	37.389	2.413	1.092	37.033	1.219	11481	38893
RM-0037	36.50	38.202	2.413	1.092	37.821	1.219	11748	39739
RM-0038	38.10	39.802	2.413	1.092	39.421	1.219	12282	41474
RM-0040	39.67	41.504	2.743	1.245	41.072	1.422	13751	44945

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RM系列

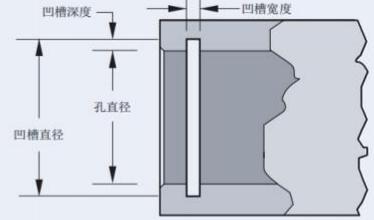
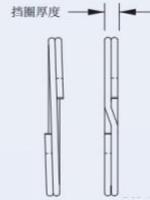
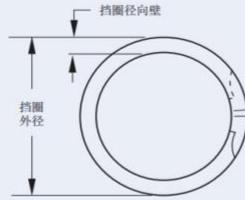
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RM - 0016

系列名称
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(mm)



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	mm	mm	mm	mm	mm	mm	N	N
RM-0041	41.28	43.205	2.743	1.245	42.774	1.422	14908	46770
RM-0042	41.99	43.942	2.743	1.245	43.485	1.422	15620	47571
RM-0043	42.85	44.907	2.997	1.245	44.450	1.422	16465	48550
RM-0044	44.45	46.584	2.997	1.245	46.050	1.422	17088	50330
RM-0046	46.05	48.108	2.997	1.245	47.625	1.422	17667	52154
RM-0047	46.99	49.200	2.997	1.245	48.692	1.422	19803	53222
RM-0048	47.63	49.784	2.997	1.245	49.327	1.422	20070	53934
RM-0049	49.23	51.435	2.997	1.245	50.927	1.422	20737	55759
RM-0051	50.80	53.111	3.251	1.245	52.603	1.422	22028	57539
RM-0052	51.99	54.305	3.251	1.245	53.797	1.422	22517	58918
RM-0054	53.98	56.312	3.251	1.245	55.753	1.422	23407	61143
RM-0055	54.99	57.404	3.505	1.245	56.871	1.422	25187	62300
RM-0056	55.58	58.014	3.505	1.245	57.455	1.422	25454	62968
RM-0057	57.15	59.614	3.505	1.245	59.030	1.422	26211	64748
RM-0059	58.72	61.290	3.505	1.245	60.706	1.422	28347	66528
RM-0060	60.33	62.890	3.505	1.245	62.306	1.422	29148	68352
RM-0062	61.90	64.592	3.759	1.245	63.983	1.422	31417	70132
RM-0064	63.50	66.192	3.759	1.245	65.583	1.422	32263	71912
RM-0065	65.07	67.894	3.759	1.245	67.259	1.422	34666	73692
RM-0067	66.68	69.494	3.759	1.245	68.859	1.422	35511	75517
RM-0068	68.00	70.841	4.013	1.245	70.282	1.422	37914	77030
RM-0070	69.85	72.771	4.013	1.245	72.161	1.422	38938	79121
RM-0071	71.45	74.397	4.013	1.245	73.736	1.422	39828	80946
RM-0072	71.98	75.032	4.267	1.245	74.371	1.422	42364	81524
RM-0073	73.03	76.073	4.267	1.245	75.413	1.422	42498	82726
RM-0075	74.60	77.673	4.267	1.245	76.987	1.422	43432	84506
RM-0076	76.20	79.299	4.267	1.549	78.638	1.727	45301	107468
RM-0078	77.77	80.924	4.267	1.549	80.213	1.727	46236	109693

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
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RM系列

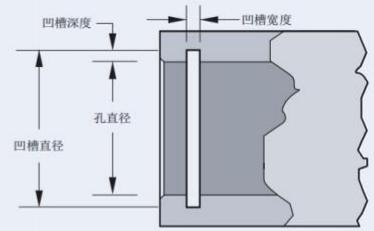
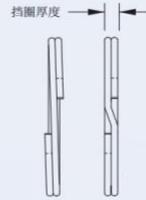
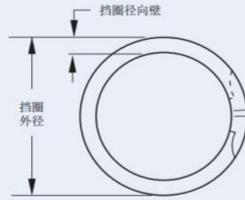
螺旋内挡圈-中负荷 Spiral Inner Retaining Ring



RM - 0016

系列名称
Overlap Type

孔直径
(mm)



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RM-0080	79.98	83.210	4.521	1.549	82.474	1.727	47526	112808
RM-0081	80.95	84.099	4.521	1.549	83.388	1.727	48105	114143
RM-0083	82.55	85.827	4.521	1.549	85.090	1.727	51131	116412
RM-0084	84.12	87.528	4.775	1.549	86.766	1.727	54157	118637
RM-0085	84.99	88.367	4.775	1.549	87.630	1.727	54735	119839
RM-0086	85.73	89.129	4.775	1.549	88.367	1.727	55225	120907
RM-0087	87.30	90.780	4.775	1.549	89.992	1.727	57316	123087
RM-0089	88.90	92.354	4.775	1.549	91.592	1.727	58340	125357
RM-0090	89.99	93.574	5.029	1.549	92.786	1.727	61277	126914
RM-0092	92.08	95.733	5.029	1.549	94.920	1.727	63858	129851
RM-0094	93.65	97.333	5.029	1.549	96.495	1.727	64970	132076
RM-0095	95.00	98.679	5.029	1.549	97.841	1.727	65860	133945
RM-0097	96.82	100.660	5.283	1.549	99.822	1.727	70755	136526
RM-0098	98.43	102.235	5.283	1.549	101.422	1.727	71912	138796
RM-0100	100.03	103.861	5.283	1.549	103.022	1.727	73069	141065
RM-0102	101.60	105.588	5.537	1.549	104.750	1.727	78009	143290
RM-0103	103.20	107.239	5.537	1.549	106.350	1.727	79255	145515
RM-0105	104.78	108.814	5.537	1.549	107.925	1.727	80456	147740
RM-0106	106.38	110.414	5.537	1.549	109.499	1.727	81658	150010
RM-0108	107.95	112.166	5.791	1.549	111.252	1.727	86909	152235
RM-0110	109.52	113.767	5.791	1.549	112.827	1.727	88155	154460
RM-0111	111.13	115.392	5.791	1.549	114.427	1.727	89445	156685
RM-0113	112.70	117.119	6.045	1.549	116.154	1.727	94919	158910
RM-0114	114.30	118.720	6.045	1.549	117.754	1.727	96254	161179
RM-0115	114.99	119.405	6.045	1.549	118.440	1.727	96832	162158
RM-0116	115.87	120.320	6.045	1.549	119.329	1.727	97589	163404
RM-0117	117.48	121.996	6.350	1.829	121.031	2.007	101861	195533
RM-0119	119.05	123.622	6.350	1.829	122.606	2.007	103196	198159
RM-0120	119.99	124.536	6.350	1.829	123.546	2.007	103997	199716

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
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RM系列

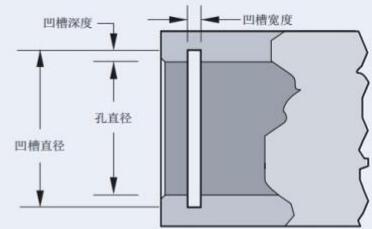
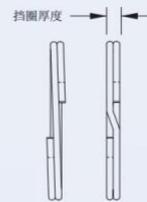
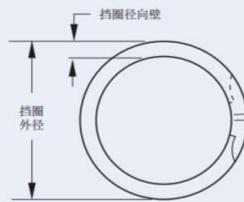
螺旋内挡圈-中负荷 Spiral Inner Retaining Ring



RM - 0016

系列名称
Wave Springs Overlap Type

孔直径
(mm)



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RM-0121	120.65	125.222	6.350	1.829	124.206	2.007	104575	200829
RM-0122	122.22	126.822	6.350	1.829	125.781	2.007	105955	203454
RM-0124	123.83	128.397	6.350	1.829	127.381	2.007	107334	206080
RM-0125	124.99	129.591	6.350	1.829	128.549	2.007	108358	208038
RM-0127	127.00	131.699	6.350	1.829	130.658	2.007	113253	211375
RM-0130	130.00	134.722	6.350	1.829	133.655	2.007	115923	216359
RM-0133	133.35	138.074	6.350	1.829	136.982	2.007	118904	221966
RM-0137	136.53	141.376	6.350	1.829	140.259	2.007	125134	227217
RM-0140	139.70	144.602	6.350	1.829	143.434	2.007	128027	232513

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What is 螺旋型 A RETAINING RING?

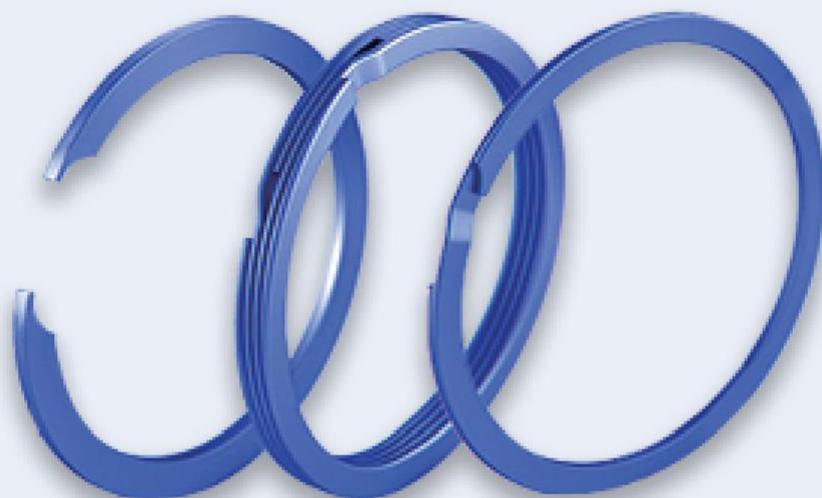
我们提供几千多种标准挡圈，备有碳素钢和不锈钢材质的现货。如果需要定制设计，可以利用无模具成本制造工艺：无论何种应用，我们都可提供具有成本效益和创新的设计解决方案。

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RMH系列

螺旋内挡圈-中重负荷 Spiral Inner Retaining Ring



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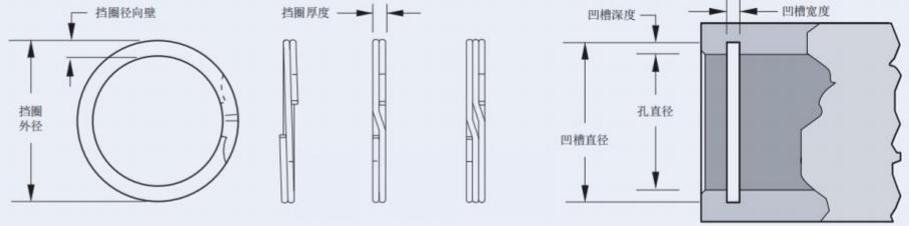
螺旋内挡圈-中重负荷 Spiral Inner Retaining Ring



RMH - 0016

系列名称
Overlap Type

孔直径
(mm)



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm 双层	mm	mm	N	N
RMH-0013	12.70	13.437	1.143	0.889	13.310	0.991	1869	11259
RMH-0014	14.27	15.164	1.143	0.889	15.037	0.991	2670	12638
RMH-0016	15.88	16.891	1.143	0.889	16.739	0.991	3338	14062
RMH-0017	17.48	18.542	1.397	0.889	18.390	0.991	3916	15486
RMH-0019	19.05	20.218	1.397	0.889	20.066	0.991	4717	16866
RMH-0020	19.74	20.955	1.651	1.067	20.803	1.168	5118	21004
RMH-0021	20.62	21.946	1.651	1.067	21.768	1.168	5874	21939
RMH-0022	22.00	23.343	1.651	1.067	23.165	1.168	6275	23407
RMH-0023	22.89	24.308	1.651	1.067	24.130	1.168	7076	24342
RMH-0024	23.83	25.324	1.905	1.067	25.121	1.168	7654	25321
RMH-0025	25.40	27.000	1.905	1.067	26.797	1.168	8811	27012
RMH-0026	25.98	27.610	1.905	1.067	27.407	1.168	9034	27635
RMH-0027	26.97	28.677	1.981	1.270	28.448	1.422	9701	31195
RMH-0029	28.58	30.353	1.981	1.270	30.099	1.422	10636	33019
RMH-0030	30.18	32.004	2.235	1.270	31.750	1.422	11570	34888
RMH-0032	31.75	33.782	2.362	1.270	33.528	1.422	13751	36713
RMH-0033	33.32	35.433	2.362	1.270	35.179	1.422	15264	38537
RMH-0035	34.93	37.109	2.489	1.270	36.830	1.422	16421	40362
RMH-0037	36.53	38.760	2.616	1.270	38.481	1.422	17622	42231
RMH-0038	38.10	40.411	2.743	1.270	40.132	1.422	18868	44055
RMH-0040	39.67	42.139	2.870	1.575	41.834	1.727	21138	56871
RMH-0041	41.28	43.866	2.870	1.575	43.561	1.727	23007	59141
RMH-0042	41.99	44.628	2.997	1.575	44.323	1.727	23941	60164
RMH-0043	42.88	45.542	2.997	1.575	45.212	1.727	24431	61455
RMH-0044	44.45	47.193	2.997	1.575	46.863	1.727	26433	63724
RMH-0046	46.02	48.844	3.124	1.575	48.514	1.727	27946	65949
RMH-0047	46.99	49.860	3.124	1.575	49.505	1.727	29103	67329
RMH-0048	47.63	50.521	3.251	1.575	50.165	1.727	29504	68263
RMH-0049	49.23	52.172	3.251	1.575	51.816	1.727	31106	70533

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
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RMH系列

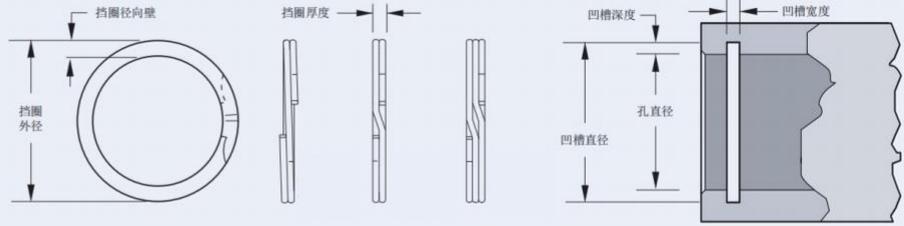
螺旋内挡圈-中重负荷 Spiral Inner Retaining Ring



RMH - 0016

系列名称
Overlap Type

孔直径
(mm)



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RMH-0051	50.80	53.975	3.505	1.575	53.594	1.727	34621	72802
RMH-0052	52.37	55.626	3.581	1.981	55.245	2.184	36980	94429
RMH-0054	53.98	57.277	3.581	1.981	56.896	2.184	38760	97322
RMH-0056	55.58	58.953	3.581	1.981	58.547	2.184	40629	100214
RMH-0057	57.15	60.604	3.581	1.981	60.198	2.184	42453	103062
RMH-0059	58.72	62.408	4.775	1.981	61.976	2.184	46547	105910
RMH-0060	60.33	64.059	4.775	1.981	63.627	2.184	48550	108758
RMH-0062	61.98	65.735	4.775	1.981	65.278	2.184	49885	111740
RMH-0064	63.50	67.386	4.775	1.981	66.929	2.184	53489	114499
RMH-0065	65.07	69.088	4.775	2.362	68.580	2.616	55625	133233
RMH-0067	66.68	70.739	4.775	2.362	70.231	2.616	57806	136526
RMH-0068	68.28	72.517	4.775	2.362	71.984	2.616	61722	139775
RMH-0070	69.85	74.193	4.775	2.362	73.660	2.616	64881	143023
RMH-0071	71.45	75.870	4.775	2.362	75.311	2.616	67240	146316
RMH-0072	71.98	76.429	4.775	2.362	75.870	2.616	68664	147384
RMH-0073	73.03	77.546	4.775	2.362	76.962	2.616	70533	149520
RMH-0076	76.20	80.975	4.775	2.362	80.391	2.616	78320	156017
RMH-0078	77.77	82.626	6.350	2.819	82.042	3.048	80901	190060
RMH-0079	79.38	84.277	6.350	2.819	83.693	3.048	83571	193976
RMH-0080	80.16	85.192	6.350	2.819	84.531	3.048	85396	195978
RMH-0083	82.55	87.630	6.350	2.819	87.020	3.048	89979	201719
RMH-0085	84.99	90.170	6.350	2.819	89.535	3.048	94741	207682
RMH-0088	87.99	93.345	6.350	2.819	92.710	3.048	101327	215024
RMH-0089	88.90	94.386	6.350	2.819	93.726	3.048	104575	217249
RMH-0090	89.99	95.529	6.350	2.819	94.869	3.048	106978	219919
RMH-0092	92.08	97.765	6.350	2.819	97.079	3.048	112897	224992
RMH-0095	95.25	101.143	6.350	2.819	100.457	3.048	121485	232780
RMH-0098	98.43	104.521	6.350	2.819	103.810	3.048	129184	240523
RMH-0100	100.03	106.121	6.350	2.819	105.410	3.048	131320	244439
RMH-0102	101.60	107.899	6.350	2.819	107.188	3.048	138395	248310

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
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RMH系列

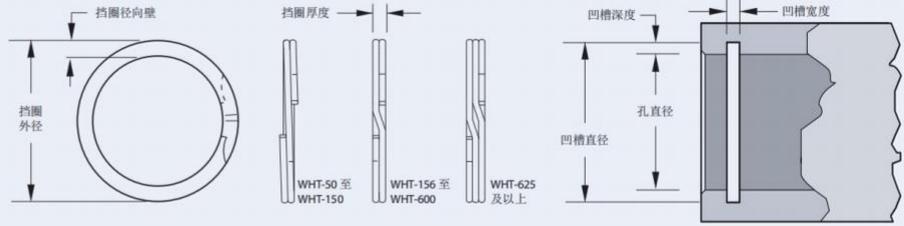
螺旋内挡圈-中重负荷 Spiral Inner Retaining Ring



RMH - 0016

系列名称
Overlap Type

孔直径
(mm)



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RMH-0085	84.99	90.170	6.350	2.819	89.535	3.048	94741	207682
RMH-0088	87.99	93.345	6.350	2.819	92.710	3.048	101327	215024
RMH-0089	88.90	94.386	6.350	2.819	93.726	3.048	104575	217249
RMH-0090	89.99	95.529	6.350	2.819	94.869	3.048	106978	219919
RMH-0092	92.08	97.765	6.350	2.819	97.079	3.048	112897	224992
RMH-0095	95.25	101.143	6.350	2.819	100.457	3.048	121485	232780
RMH-0098	98.43	104.521	6.350	2.819	103.810	3.048	129184	240523
RMH-0100	100.03	106.121	6.350	2.819	105.410	3.048	131320	244439
RMH-0102	101.60	107.899	6.350	2.819	107.188	3.048	138395	248310
RMH-0105	104.78	111.074	7.925	2.819	110.363	3.048	142712	256053
RMH-0108	107.95	114.300	7.925	2.819	113.538	3.048	147073	263796
RMH-0110	109.98	116.484	7.925	2.819	115.722	3.048	153926	268780
RMH-0114	114.30	121.107	7.925	2.819	120.269	3.048	167009	279327
RMH-0117	117.48	124.384	7.925	2.819	123.571	3.048	174574	287070
RMH-0121	120.65	127.711	7.925	2.819	126.873	3.048	183785	294857
RMH-0127	127.00	134.493	7.925	2.819	133.604	3.048	204478	310343
RMH-0133	133.35	141.199	9.525	3.226	140.208	3.531	222945	372866
RMH-0137	136.53	144.399	9.525	3.226	143.383	3.531	228241	381721
RMH-0140	139.70	147.574	9.525	3.226	146.558	3.531	233536	390621
RMH-0146	146.05	153.975	9.525	3.226	152.908	3.531	244172	408377
RMH-0152	152.40	160.376	25.400	3.226	159.258	3.531	254807	426132
三层								
RMH-0159	158.75	167.030	7.925	4.191	165.862	4.420	275233	576676
RMH-0165	165.10	173.660	7.925	4.191	172.466	4.420	296459	599771
RMH-0168	168.28	177.114	7.925	4.191	175.895	4.420	312568	611297
RMH-0171	171.45	180.442	7.925	4.191	179.197	4.420	324850	622822
RMH-0178	177.80	187.096	7.925	4.191	185.801	4.420	347901	645873
RMH-0184	184.15	193.751	9.525	4.801	192.405	5.309	371709	766246
RMH-0191	190.50	200.533	9.525	4.801	199.136	5.309	401034	792679

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
您想要的各材料, 各规格挡圈, 我们都可为您定做, 详细请咨询客户顾问



RMH系列

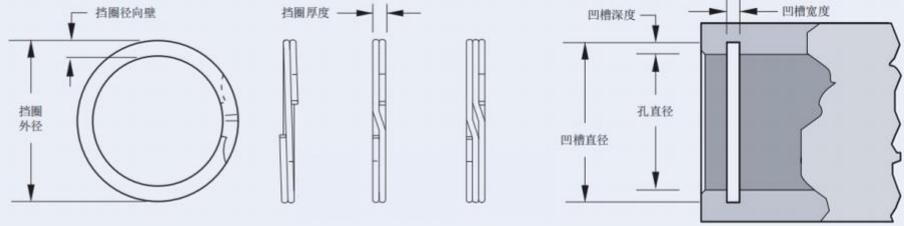
螺旋内挡圈-中重负荷 Spiral Inner Retaining Ring



RMH - 0016

系列名称
Overlap Type

孔直径
(mm)



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RMH-0197	196.85	207.162	9.525	4.801	205.740	5.309	426622	819112
RMH-0203	203.20	213.817	9.525	4.801	212.344	5.309	452966	845500
RMH-0210	209.55	220.472	9.525	4.801	218.948	5.309	480066	871933
RMH-0216	215.90	227.127	9.525	4.801	225.552	5.309	508012	898366
RMH-0222	222.25	233.909	9.525	4.801	232.283	5.309	544947	924799
RMH-0229	228.60	240.563	9.525	4.801	238.887	5.309	574673	951188
RMH-0235	234.95	247.294	9.525	4.801	245.593	5.309	611030	977621
RMH-0241	241.30	253.975	9.525	4.801	252.222	5.309	642491	1004054
RMH-0248	247.65	260.604	9.525	4.801	258.801	5.309	674709	1030487
RMH-0254	254.00	268.021	9.525	4.801	265.430	5.309	707728	1056875
RMH-0267	266.70	281.229	9.525	4.801	278.638	5.309	776169	1109741

PS:基于45,000psi的凹槽材料屈服强度和安全系数，直角边缘线材
您想要的各材料，各规格挡圈，我们都可为您定做，详细请咨询客户顾问

What is 螺旋型 A RETAINING RING?

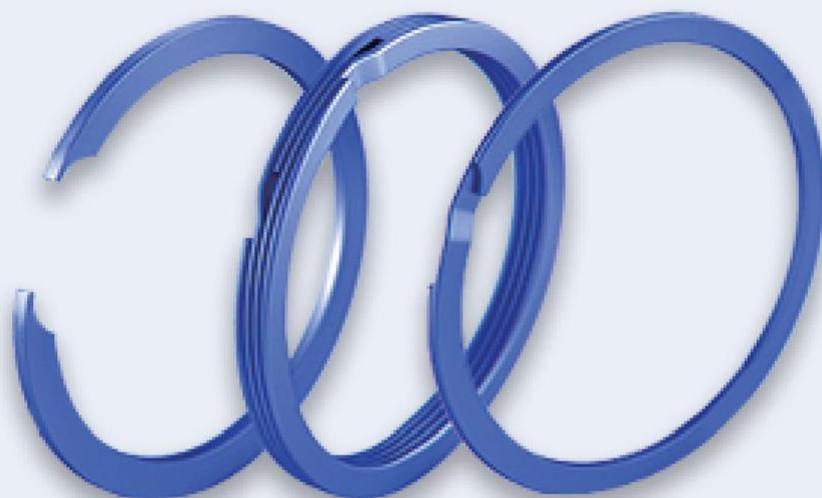
我们提供几千多种标准挡圈，备有碳素钢和不锈钢材质的现货。如果需要定制设计，可以利用无模具成本制造工艺：无论何种应用，我们都可提供具有成本效益和创新的设计解决方案。

We provide more than thousands of standard retaining rings, with carbon steel and stainless steel in stock. If you need custom design, you can use the cost-free manufacturing process: no matter what the application, we can provide cost-effective and innovative design solutions.



RH系列

螺旋内挡圈-重负荷 Spiral Inner Retaining Ring



没有凸耳



种类多样



自由定制



RH系列

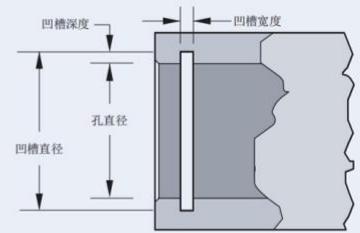
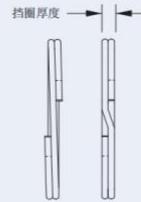
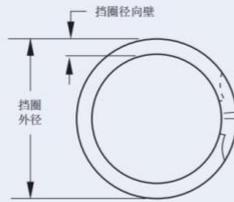
螺旋内挡圈-重负荷 Spiral Inner Retaining Ring



RH - 0016

系列名称
Overlap Type

孔直径
(mm)



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RH-0006	6.35	6.860	0.510	0.380	6.810	0.510	707	2494
RH-0008	7.92	8.460	0.640	0.380	8.380	0.510	880	3112
RH-0010	9.53	10.160	0.760	0.640	10.080	0.740	1298	6410
RH-0011	11.10	11.790	0.890	0.640	11.710	0.740	1649	7468
RH-0013	12.70	13.670	1.140	0.890	13.460	0.990	2356	11247
RH-0014	14.27	15.370	1.400	0.890	15.140	0.990	3032	12625
RH-0016	15.88	17.150	1.400	0.890	16.890	0.990	3912	14047
RH-0017	17.48	18.870	1.650	0.890	18.590	0.990	4756	15470
RH-0019	19.05	20.500	1.650	1.070	20.220	0.990	5423	16848
RH-0020	19.74	21.230	1.910	1.070	20.960	1.170	5868	20982
RH-0021	20.62	22.170	1.910	1.070	21.890	1.170	6401	21915
RH-0022	22.00	23.650	1.910	1.070	23.370	1.170	7335	23382
RH-0023	22.89	24.690	2.160	1.070	24.360	1.170	8224	24316
RH-0024	23.83	25.730	2.160	1.070	25.400	1.170	9157	25294
RH-0025	25.40	27.430	2.160	1.070	27.080	1.170	10358	26983
RH-0026	25.98	28.070	2.160	1.070	27.710	1.170	10935	27605
RH-0027	26.97	28.910	2.620	1.270	28.700	1.420	11335	31161
RH-0029	28.58	30.610	2.620	1.270	30.400	1.420	12714	32984
RH-0030	30.18	32.280	2.620	1.270	32.050	1.420	13825	34851
RH-0032	31.75	34.010	2.620	1.270	33.780	1.420	15692	36674
RH-0033	33.32	35.710	3.000	1.270	35.460	1.420	17337	38496
RH-0035	34.93	37.360	3.000	1.270	37.110	1.420	18581	40319
RH-0037	36.55	39.090	3.000	1.270	38.810	1.420	20359	42186
RH-0038	38.10	40.770	3.000	1.270	40.490	1.420	22137	44008
RH-0040	39.67	42.550	3.250	1.570	42.110	1.730	23560	56811
RH-0041	41.28	44.550	3.250	1.570	43.820	1.730	25516	59078
RH-0042	41.99	45.010	3.250	1.570	44.580	1.730	26494	60100

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
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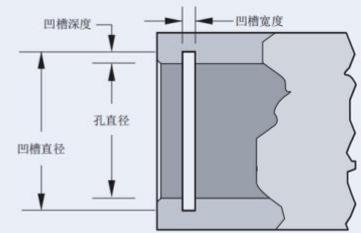
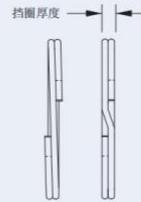
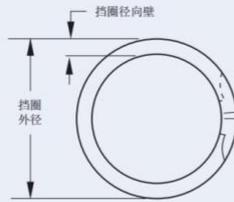
RH系列

螺旋内挡圈-重负荷 Spiral Inner Retaining Ring

RH - 0016

系列名称
Overlap Type

孔直径
(mm)



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RH-0043	42.88	45.970	3.250	1.570	45.520	1.730	27605	61389
RH-0044	44.45	47.650	3.250	1.570	47.190	1.730	29694	63656
RH-0046	46.02	49.280	3.250	1.570	48.820	1.730	31339	65879
RH-0047	46.99	50.320	4.010	1.570	49.830	1.730	32539	67257
RH-0048	47.63	51.000	4.010	1.570	50.520	1.730	33606	68191
RH-0049	49.23	52.710	4.010	1.570	52.220	1.730	35918	70458
RH-0051	50.80	54.410	4.010	1.570	53.900	1.730	38318	72725
RH-0052	52.37	55.910	4.270	1.980	55.520	2.180	40185	94329
RH-0054	53.98	57.580	4.270	1.980	57.180	2.180	42052	97218
RH-0056	55.58	59.280	4.270	1.980	58.880	2.180	44675	100108
RH-0057	57.15	60.930	4.270	1.980	60.500	2.180	46675	102953
RH-0059	58.72	62.660	5.080	1.980	62.230	2.180	50143	105798
RH-0060	60.33	64.390	5.080	1.980	63.930	2.180	52988	108643
RH-0062	61.98	66.090	5.080	1.980	65.630	2.180	55210	111621
RH-0064	63.50	67.740	5.080	1.980	67.260	2.180	58144	114377
RH-0065	65.07	69.420	5.720	2.360	68.940	2.620	61167	133092
RH-0067	66.68	71.150	5.720	2.360	70.640	2.620	64323	136381
RH-0068	68.28	72.850	5.720	2.360	72.340	2.620	67568	139626
RH-0070	69.85	74.520	5.720	2.360	74.020	2.620	70858	142871
RH-0071	71.45	76.230	5.720	2.360	75.690	2.620	74236	146161
RH-0072	71.98	76.890	5.720	2.360	76.350	2.620	76592	147228
RH-0073	73.03	78.030	5.720	2.360	77.500	2.620	79482	149361
RH-0076	76.20	81.380	5.720	2.360	80.820	2.620	81349	155852
RH-0078	77.77	83.080	7.140	2.820	82.500	3.050	89483	189858
RH-0079	79.38	84.790	7.140	2.820	84.200	3.050	93306	193770
RH-0080	80.19	85.620	7.140	2.820	84.200	3.050	95218	195770
RH-0083	82.55	88.140	7.140	2.820	85.040	3.050	100063	201505
RH-0085	84.99	90.700	7.140	2.820	87.530	3.050	105131	207461
RH-0088	87.99	94.010	7.140	2.820	90.070	3.050	114288	214796
RH-0089	88.90	94.890	7.140	2.820	93.350	3.050	115488	217019

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
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RH系列

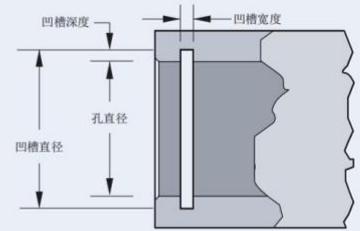
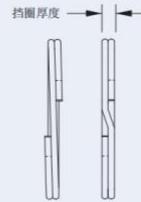
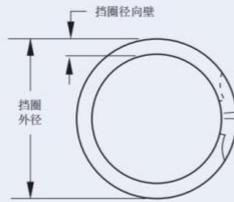
螺旋内挡圈-重负荷 Spiral Inner Retaining Ring



RH - 0016

系列名称
Overlap Type

孔直径
(mm)



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RH-0090	89.99	96.040	7.140	2.820	94.230	3.050	118022	219686
RH-0092	92.08	98.250	7.920	2.820	95.910	3.050	123001	224753
RH-0095	95.25	101.650	7.920	2.820	97.560	3.050	131980	232533
RH-0098	98.43	105.050	7.920	2.820	104.320	3.050	141227	240267
RH-0100	100.03	106.760	7.920	2.820	106.020	3.050	146027	244179
RH-0102	101.60	108.460	7.920	2.820	107.700	3.050	150828	248047
RH-0105	104.78	110.970	7.920	2.820	110.210	3.050	155540	255781
RH-0108	107.95	114.330	7.920	2.820	113.540	3.050	160252	263516
RH-0110	109.88	116.540	7.920	2.820	115.720	3.050	163275	268495
RH-0114	114.30	121.110	7.920	2.820	120.270	3.050	169676	279030
RH-0117	117.48	124.430	7.920	2.820	123.570	3.050	174388	286765
RH-0121	120.65	127.760	7.920	2.820	126.870	3.050	183590	294544
RH-0127	127.00	134.540	7.920	2.820	133.600	3.050	204261	310014
RH-0133	133.35	141.200	8.890	3.230	140.210	3.530	222709	372470
RH-0137	136.53	144.530	8.890	3.230	143.510	3.530	227998	381316
RH-0140	139.70	147.570	8.890	3.230	146.560	3.530	233288	390207
RH-0146	146.05	153.970	8.890	3.230	152.910	3.530	243913	407943
RH-0152	152.40	160.380	8.890	3.230	159.260	3.530	254537	425680
RH-0159	158.75	167.030	9.650	3.960	165.860	4.420	274941	544636
RH-0165	165.10	173.690	9.650	3.960	172.470	4.420	296145	566418
RH-0168	168.28	177.140	9.650	3.960	175.900	4.420	312236	577309
RH-0171	171.45	180.470	9.650	3.960	179.200	4.420	324505	588199
RH-0178	177.80	187.100	9.650	3.960	185.800	4.420	347532	610026
RH-0184	184.15	193.750	10.620	4.750	192.410	5.310	371314	757342
RH-0191	190.50	200.530	10.620	4.750	199.140	5.310	400609	783436
RH-0184	184.15	207.190	10.620	4.750	205.740	5.310	426169	809574
RH-0203	203.20	213.840	10.620	4.750	212.340	5.310	452485	835668
RH-0210	209.55	220.470	11.100	4.750	218.950	5.310	479557	861806
RH-0216	215.90	227.130	11.100	4.750	225.550	5.310	507473	887900

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
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RH系列

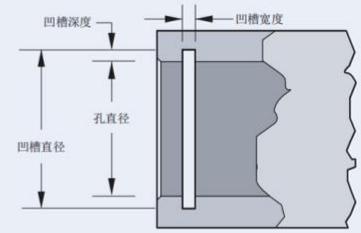
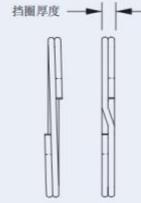
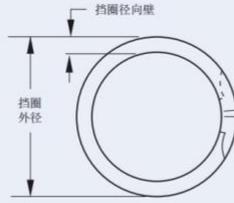
螺旋内挡圈-重负荷 Spiral Inner Retaining Ring



RH - 0016

系列名称
Overlap Type

孔直径
(mm)



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RH-0222	222.25	233.910	11.100	4.750	232.280	5.310	544369	914038
RH-0229	228.60	240.560	11.100	4.750	238.890	5.310	574063	940132
RH-0235	234.95	247.320	11.100	4.750	245.590	5.310	610381	966271
RH-0241	241.30	254.000	12.700	4.750	252.220	5.310	641810	992364
RH-0248	247.65	260.600	12.700	4.750	258.800	5.310	669548	1018503
RH-0254	254.00	267.280	12.700	4.750	265.430	5.310	706977	1044596
RH-0260	260.35	273.960	12.700	4.750	272.060	5.310	744007	1070735
RH-0267	266.70	280.590	12.700	4.750	278.640	5.310	775346	1096828
RH-0273	273.05	287.350	12.700	4.750	285.340	5.310	817443	1122967
RH-0279	279.40	294.010	12.700	4.750	291.970	5.310	857183	1149060
RH-0286	286.00	300.690	12.700	4.750	298.600	5.310	894346	1175199
RH-0292	292.10	307.390	14.270	4.750	305.260	5.310	935909	1201292
RH-0298	298.45	314.070	14.270	4.750	311.890	5.310	978406	1227431
RH-0305	304.80	320.750	14.270	4.750	318.520	5.310	1018058	1253525
RH-0311	311.15	327.430	14.270	4.750	325.150	5.310	1062377	1279618
RH-0318	317.50	334.110	14.270	4.750	331.800	5.310	1107630	1305757
RH-0324	323.85	340.790	14.270	4.750	338.430	5.310	1149816	1331850
RH-0330	330.20	347.470	16.810	4.750	345.060	5.310	1196847	1357989
RH-0337	336.55	354.150	16.810	4.750	351.690	5.310	1240678	1384082
RH-0343	342.90	360.860	16.810	4.750	358.340	5.310	1289576	1410221
RH-0349	349.25	367.540	16.810	4.750	364.970	5.310	1339363	1436314
RH-0356	355.60	374.190	16.810	4.750	371.600	5.310	1385727	1462453
RH-0362	361.95	380.870	16.810	4.750	378.230	5.310	1437337	1488546
RH-0368	368.30	387.580	19.050	4.750	384.890	5.310	1489880	1514685
RH-0375	374.65	394.260	19.050	4.750	391.520	5.310	1538734	1540779
RH-0381	381.00	400.940	19.050	4.750	398.150	5.310	1593099	1566917

PS:基于45,000psi的凹槽材料屈服强度和安全系数，直角边缘线材
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What is **波型** A RETAINING RING?

波形挡圈是具有轴向波形的双层弹性挡圈。这些挡圈的功能类似于传统的挡圈（提供可拆卸的轴肩），但在安装后可提供弹力，向凹槽壁和装配组件施加压力。此弹力可补偿公差叠加或游隙。

The corrugated retaining ring is a double-layer elastic retaining ring with axial waveform. The function of these retaining rings is similar to that of conventional retaining rings (providing removable shoulders), but after installation, they can provide elastic force to apply pressure to the groove wall and assembly components. This spring force compensates for tolerance superposition or play.



RW系列

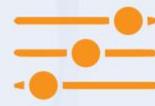
波形内挡圈 Corrugated Inner Retaining Ring



没有凸耳



提供弹力



自由定制



RW系列

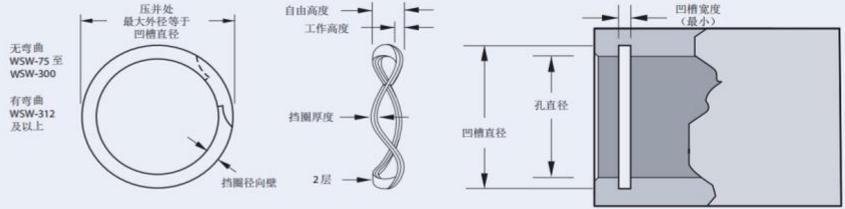
波形内挡圈 Corrugated Inner Retaining Ring



RW - 0016

系列名称
Overlap Type

孔直径
(mm)



编号 Mascot	孔直径 Aperture Diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	波数 Wave Number
	mm	mm	mm	mm	mm	
RW-0019	19.05	0.889	1.651	20.218	3.023	3
RW-0022	22.23	1.067	2.159	23.647	2.921	3
RW-0025	25.40	1.067	2.159	27.076	3.175	3
RW-0029	28.58	1.270	3.251	30.404	3.302	3
RW-0032	31.75	1.270	3.251	33.782	3.556	3
RW-0035	34.93	1.270	3.251	37.109	3.302	4
RW-0038	38.10	1.270	3.251	40.488	3.556	4
RW-0041	41.28	1.575	4.013	43.815	3.556	4
RW-0044	44.45	1.575	4.013	47.193	3.683	4
RW-0048	47.63	1.575	4.013	50.521	3.708	4
RW-0051	50.80	1.575	4.013	53.899	3.937	4
RW-0054	53.98	1.981	4.775	57.175	4.445	4
RW-0057	57.15	1.981	4.775	60.503	4.572	4
RW-0060	60.33	1.981	4.775	63.932	4.699	4
RW-0064	63.50	1.981	4.775	67.259	4.775	4
RW-0067	66.68	2.362	5.715	70.637	5.715	4
RW-0070	69.85	2.362	5.715	74.016	5.944	4
RW-0073	73.03	2.362	5.715	77.495	5.842	4
RW-0076	76.20	2.362	5.715	80.823	5.969	4

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
您想要的各材料, 各规格挡圈, 我们都可为您定做, 详细请咨询客户顾问



RW系列

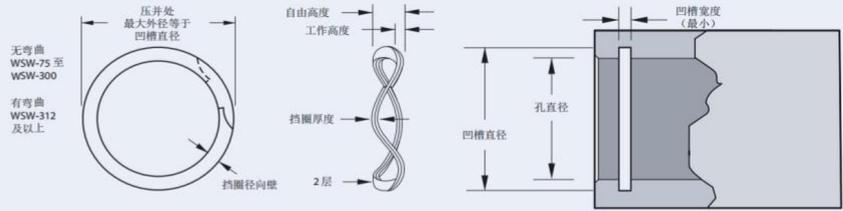
波形内挡圈 Corrugated Inner Retaining Ring



RW - 0016

系列名称
Overlap Type

孔直径
(mm)



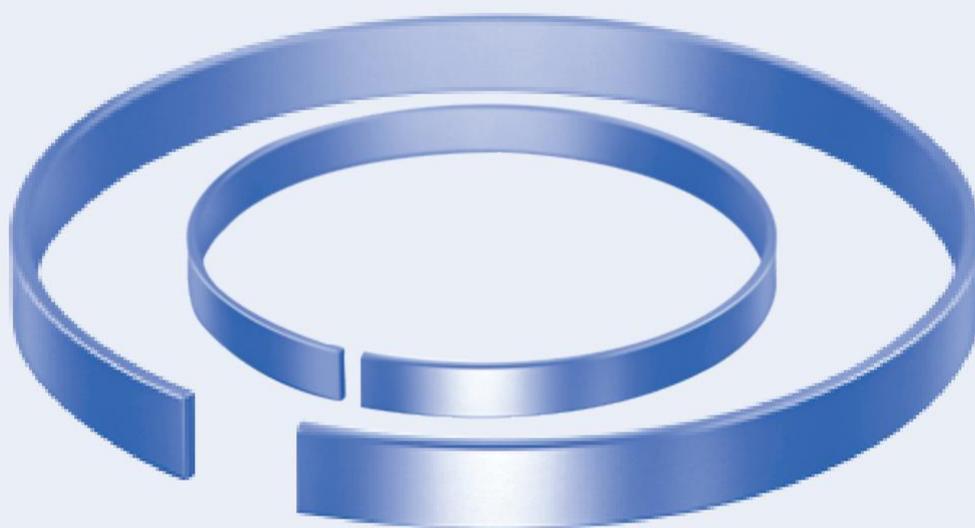
编号 Mascot	孔直径 Aperture Diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	波数 Wave Number
	mm	mm	mm	mm	mm	
RW-0079	79.38	2.819	7.137	84.201	6.477	4
RW-0083	82.55	2.819	7.137	87.528	6.477	4
RW-0089	88.90	2.819	7.137	94.234	6.350	4
RW-0092	92.08	2.819	7.137	97.561	6.350	4
RW-0095	95.25	2.819	7.925	100.940	6.604	4
RW-0098	98.43	2.819	7.925	104.318	6.731	4
RW-0102	101.60	2.819	7.925	107.696	6.604	4
RW-0105	104.78	2.819	7.925	110.871	6.680	4
RW-0108	107.95	2.819	7.925	114.046	6.833	4
RW-0114	114.30	2.819	7.925	120.396	6.477	5
RW-0121	120.65	2.819	7.925	126.873	6.528	5
RW-0127	127.00	2.819	7.925	133.604	6.401	5

PS:基于45,000psi的凹槽材料屈服强度和安全系数，直角边缘线材
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RF系列

扁线内挡圈 Flat Wire Inner Retaining Ring



没有凸耳



特殊适用



自由定制



RF系列

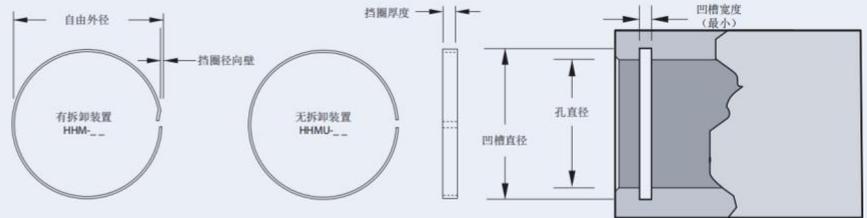
扁线内挡圈 Flat Wire Inner Retaining Ring



RF - 0016

系列名称
Overlap Type

孔直径
(mm)



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength
	mm	mm	mm	mm	mm	mm	N
RF-0010	10	10.63	0.43	1.14	10.43	1.27	1052
RF-0011	11	11.65	+0.30/-0.00	1.14	11.43	1.27	1157
RF-0012	12	12.67	0.43	1.14	12.43	1.27	1263
RF-0013	13	13.79	0.53	1.65	13.53	1.78	1690
RF-0014	14	14.81	0.53	1.65	14.53	±0.05	1820
RF-0015	15	15.83	0.53	1.65	15.53	1.78	1950
RF-0016	16	16.85	+0.38/+0.00	1.65	16.53	1.78	2080
RF-0017	17	17.87	0.53	±0.04	17.53	1.78	2210
RF-0018	18	18.97	0.61	2.24	18.61	2.36	2674
RF-0019	19	19.99	0.61	2.24	19.61	2.36	2822
RF-0020	20	21.01	0.61	2.24	20.61	2.36	2971
RF-0021	21	22.03	0.61	2.24	21.61	2.36	3119
RF-0022	22	23.05	+0.46/+0.00	2.24	22.61	2.36	3268
RF-0023	23	24.07	0.61	2.24	23.61	±0.08	3417
RF-0024	24	25.09	0.61	2.24	24.61	2.36	3565
RF-0025	25	26.11	0.61	2.24	25.61	2.36	3714
RF-0026	26	27.28	0.76	±0.10	26.76	3.12	4828
RF-0027	27	28.30	0.76	3.00	27.76	3.12	5013
RF-0028	28	29.32	0.76	3.00	28.76	3.12	5199
RF-0029	29	30.34	0.76	3.00	29.76	3.12	5385
RF-0030	30	31.36	0.76	3.00	30.76	3.12	5570
RF-0031	31	32.38	0.76	3.00	31.76	3.12	5756
RF-0032	32	33.40	0.76	3.00	32.76	3.12	5942
RF-0033	33	34.52	+0.51/-0.00	3.81	33.86	3.94	6945
RF-0034	34	35.54	0.86	3.81	34.86	±0.10	7155
RF-0035	35	36.56	0.86	3.81	35.86	3.94	7365

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
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RF系列

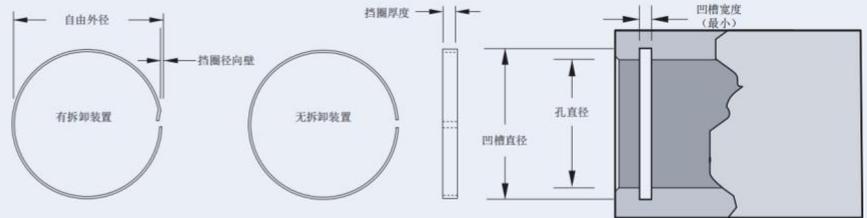
扁线内挡圈 Flat Wire Inner Retaining Ring



RF - 0016

系列名称
Overlap Type

孔直径
(mm)



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength
	mm	mm	mm	mm	mm	mm	N
RF-0036	36	37.58	0.86	3.81	36.86	3.94	7576
RF-0037	37	38.60	0.86	3.81	37.86	3.94	7786
RF-0038	38	39.62	0.86	3.81	38.86	3.94	7997
RF-0040	40	41.66	0.86	3.81	40.86	3.94	8418
RF-0041	41	42.68	0.86	3.81	41.86	3.94	8628
RF-0042	42	43.70	0.86	3.81	42.86	3.94	8838
RF-0045	45	46.87	0.97	4.75	45.97	4.88	10584
RF-0047	47	48.91	0.97	4.75	47.97	4.88	11054
RF-0048	48	49.93	0.97	4.75	48.97	4.88	11289
RF-0050	50	51.97	0.97	4.75	50.97	4.88	11760
RF-0051	51	52.99	0.97	4.75	51.97	4.88	11995
RF-0052	52	54.01	0.97	4.75	52.97	4.88	12230
RF-0055	55	57.07	0.97	4.75	55.97	4.90	12936
RF-0056	56	58.09	0.97	4.75	56.97	4.90	13171
RF-0057	57	59.11	0.97	4.75	57.97	4.90	13406
RF-0058	58	60.13	0.97	4.75	58.97	4.90	13641
RF-0060	60	62.17	0.97	4.75	60.97	4.90	14112
RF-0062	62	64.38	1.14	5.72	63.14	5.87	17268
RF-0063	63	65.40	1.14	5.72	64.14	5.87	17547
RF-0064	64	66.42	1.14	5.72	65.14	5.87	17826
RF-0065	65	67.44	1.14	5.72	66.14	5.87	18104
RF-0067	67	69.48	1.14	5.72	68.14	5.87	18661
RF-0068	68	70.50	1.14	5.72	69.14	5.87	18940
RF-0070	70	72.54	1.14	5.72	71.14	5.87	19497
RF-0072	72	74.58	1.14	5.72	73.14	5.87	20054
RF-0073	75	77.64	1.14	5.72	76.14	5.87	20889
RF-0074	76	78.66	1.14	8.72	77.14	5.87	21168

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您想要的各材料, 各规格挡圈, 我们都可为您定做, 详细请咨询客户顾问

What is 等截面 A RETAINING RING?

等截面弹性挡圈是具有间隙的单层直角边缘挡圈。配有拆卸装置，可根据具体的内部或外部应用情况加以利用。这些弹性挡圈为重负荷挡圈，能够承受非常高的力和轴向负荷。

The constant section circlip is a single-layer right angle edge circlip with clearance. Equipped with disassembly device, which can be used according to specific internal or external applications. These circlips are heavy-duty circlips and can withstand very high forces and axial loads.



RC系列

等截面内挡圈

Equal Section Inner Retaining Ring



没有凸耳



重负荷



自由定制



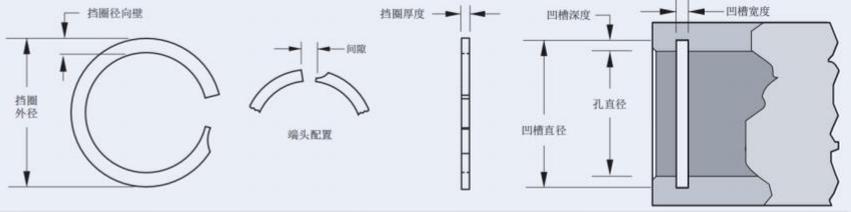
RC-A系列

等截面内挡圈-A端 Equal Section Inner Retaining Ring



RC **0016** - **A**

系列名称 孔直径 端口
Overlap Type (mm) 端□



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RC0013-A	13	13.73	1.40	0.94	13.60	1.10	1931	10591
RC0014-A	14	14.74	1.40	0.94	14.60	1.10	2077	11396
RC0015-A	15	15.85	1.40	0.94	15.70	1.10	2602	12224
RC0016-A	16	16.90	1.65	0.94	16.80	1.10	3172	13029
RC0017-A	17	17.97	1.65	0.94	17.80	1.10	3367	13838
RC0018-A	18	19.18	1.90	0.94	19.00	1.10	4457	14666
RC0019-A	19	20.25	1.90	0.94	20.00	1.10	4702	15471
RC0020-A	20	21.20	1.90	0.94	21.00	1.10	4951	16276
RC0021-A	21	22.21	1.90	0.94	22.00	1.10	5200	17103
RC0022-A	22	23.22	1.90	0.94	23.00	1.10	5445	17913
RC0023-A	23	24.23	1.90	0.94	24.00	1.10	5698	18736
RC0024-A	24	25.40	2.15	1.15	25.20	1.30	6539	23927
RC0025-A	25	26.45	2.15	1.15	26.20	1.30	6806	24914
RC0026-A	26	27.46	2.15	1.15	27.20	1.30	7082	25929
RC0027-A	27	28.47	2.38	1.15	28.20	1.30	7353	26916
RC0028-A	28	29.68	2.38	1.15	29.40	1.30	9702	27904
RC0029-A	29	30.69	2.38	1.15	30.40	1.30	10053	28918
RC0030-A	30	31.79	2.38	1.15	31.40	1.30	10395	29905
RC0031-A	31	33.01	2.38	1.15	32.70	1.30	12660	30893
RC0032-A	32	33.93	2.38	1.15	33.70	1.30	13073	31907
RC0033-A	33	35.03	2.38	1.15	34.70	1.30	13478	32895
RC0034-A	34	36.04	3.25	1.44	35.70	1.60	13892	40319
RC0035-A	35	37.35	3.25	1.44	37.00	1.60	16899	41493
RC0036-A	36	38.36	3.25	1.44	38.00	1.60	17375	42663
RC0037-A	37	39.37	3.25	1.44	39.00	1.60	17869	43868
RC0038-A	38	40.44	3.25	1.44	40.00	1.60	18344	45043
RC0040-A	40	42.86	4.01	1.69	42.50	1.85	24265	55621

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材

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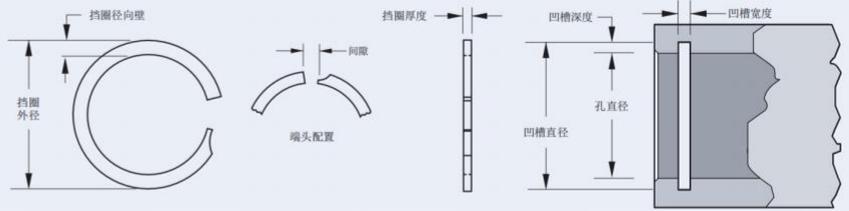
RC-A系列

等截面内挡圈-A端 Equal Section Inner Retaining Ring



RC **0016** - **A**

系列名称 孔直径 端口
Overlap Type (mm)



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RC0041-A	41	43.91		1.69	43.50	1.85	24866	56995
RC0042-A	42	44.92	+0.51/-0.00	1.69	44.50	1.85	25484	58410
RC0045-A	45	47.88		1.69	47.50	1.85	27303	62578
RC0047-A	47	49.97		1.69	49.50	1.85	28504	65331
RC0048-A	48	50.98		1.69	50.50	1.85	29118	66741
RC0050-A	50	53.50		1.93	53.00	2.15	36529	75282
RC0051-A	51	54.43		1.93	54.00	2.15	37249	76776
RC0052-A	52	55.52		1.93	55.00	2.15	37974	78266
RC0055-A	55	58.55		1.93	58.00	2.15	40163	82777
RC0056-A	56	59.56	+0.63/-0.00	1.93	59.00	2.15	40906	84307
RC0057-A	57	60.68		1.93	60.00	2.15	41631	85797
RC0058-A	58	61.58		1.93	61.00	2.15	42352	87287
RC0060-A	60	63.60		1.93	63.00	2.15	43819	90308
RC0062-A	62	65.58		1.93	65.00	2.15	45283	93328
RC0063-A	63	66.63		1.93	66.00	2.15	46008	94823
RC0064-A	64	67.64		2.41	67.00	2.65	46751	114742
RC0065-A	65	68.70		2.41	68.00	2.65	47471	116517
RC0067-A	67	70.54		2.41	70.00	2.65	48939	120115
RC0068-A	68	71.84		2.41	71.00	2.65	49660	121890
RC0070-A	70	73.64		2.41	73.00	2.65	51128	125489
RC0072-A	72	75.72	+0.76/-0.00	2.41	75.00	2.65	52591	129083
RC0075-A	75	78.75		2.41	78.00	2.65	54780	134456
RC0076-A	76	79.88		2.41	79.00	2.65	55505	136231
RC0078-A	78	81.73		2.41	81.00	2.65	56968	139830
RC0080-A	80	84.30		2.41	83.50	2.65	68342	143428
RC0082-A	82	86.32		2.41	85.50	2.65	70033	146978
RC0085-A	85	89.35		2.91	88.50	3.15	72595	175046

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材

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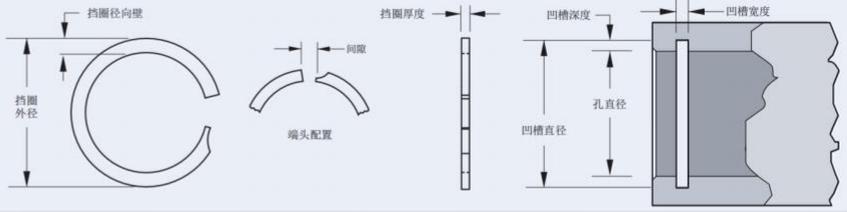
RC-A系列

等截面内挡圈-A端 Equal Section Inner Retaining Ring



RC **0016** - **A**

系列名称 孔直径 端口
Overlap Type (mm) 端□



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RC0088-A	88	92.38	6.30	2.91	91.50	3.15	75175	181269
RC0090-A	90	94.70	6.30	2.91	93.50	3.15	76865	185353
RC0092-A	92	96.50	6.30	2.91	95.50	3.15	78582	189485
RC0095-A	95	99.62	6.30	2.91	98.50	3.15	81140	195659
RC0098-A	98	102.71	6.30	2.91	101.50	3.15	83702	201829
RC0100-A	100	104.50	6.30	2.91	103.50	3.15	85415	205962
RC0102-A	102	107.27	6.73	3.89	106.00	4.15	87127	269224
RC0105-A	105	109.96	6.73	3.89	109.00	4.15	102687	277133
RC0108-A	108	113.09	6.73	3.89	112.00	4.15	105619	285042
RC0110-A	110	115.10	6.73	3.89	114.00	4.15	107580	290340
RC0112-A	112	117.12	6.73	3.89	116.00	4.15	109520	295567
RC0115-A	115	120.15	6.73	3.89	119.00	4.15	112473	303547
RC0120-A	120	125.60	6.73	3.89	124.00	4.15	117344	316687
RC0125-A	125	130.25	6.73	3.89	129.00	4.15	122237	329893
RC0127-A	127	132.27	6.73	3.89	131.00	4.15	124199	335187
RC0130-A	130	135.30	6.73	3.89	134.00	4.15	127130	343096
RC0135-A	135	140.35	6.73	3.89	139.00	4.15	132023	356303
RC0140-A	140	145.26	6.73	3.89	144.00	4.15	136916	369509
RC0145-A	145	150.45	6.73	3.89	149.00	4.15	141809	382716
RC0150-A	150	156.50	8.03	3.89	155.00	4.15	181986	395923
RC0155-A	155	161.55	8.03	3.89	160.00	4.15	188026	409063
RC0160-A	160	166.60	8.03	3.89	165.00	4.15	194094	422270
RC0165-A	165	171.70	8.03	3.89	170.00	4.15	200166	435476
RC0170-A	170	176.70	8.03	3.89	175.00	4.15	206237	448683
RC0175-A	175	181.75	8.03	3.89	180.00	4.15	212305	461890
RC0180-A	180	186.80	8.03	3.89	185.00	4.15	218377	475097
RC0185-A	185	191.85	8.03	3.89	190.00	4.15	224417	488232

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材

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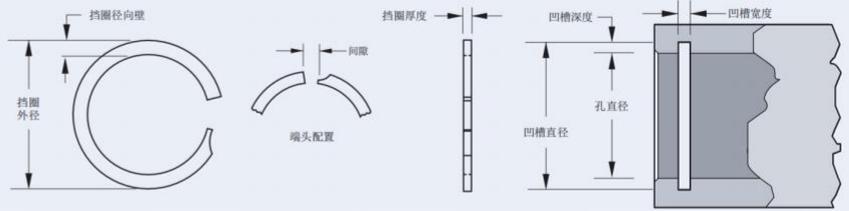


RC-A系列

等截面内挡圈-A端 Equal Section Inner Retaining Ring

RC **0016** - **A**

系列名称 孔直径 端口
Overlap Type (mm) □



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength	
	mm	mm	mm	mm	mm	mm	N	N	
RC0190-A	190	197.15	8.03	±0	3.89	195.00	4.15	230489	501439
RC0195-A	195	201.95	8.03	3.89	200.00	4.15	236556	514646	
RC0200-A	200	207.00	8.03	3.89	205.00	4.15	242628	527853	
RC0210-A	210	217.93	9.48	4.87	216.00	5.15	306763	657096	
RC0220-A	220	228.20	9.48	4.87	226.00	5.15	321344	688327	
RC0230-A	230	238.30	9.48	4.87	236.00	5.15	335961	719638	
RC0240-A	240	248.40	9.48	4.87	246.00	5.15	350578	750953	
RC0250-A	250	258.50	9.48	4.87	256.00	5.15	365199	782264	
RC0260-A	260	270.77	11.05	4.87	268.00	5.15	505300	813500	
RC0270-A	270	280.70	11.05	4.87	278.00	5.15	524748	844811	
RC0280-A	280	290.57	11.05	±0.18	4.87	288.00	5.15	544200	876126
RC0290-A	290	300.90	11.05	4.87	298.00	5.15	563599	907357	
RC0300-A	300	311.00	11.05	4.87	308.00	5.15	583051	938673	

PS:基于45,000psi的凹槽材料屈服强度和安全系数，直角边缘线材

您想要的各材料，各规格挡圈，我们都可为您定做，详细请咨询客户顾问



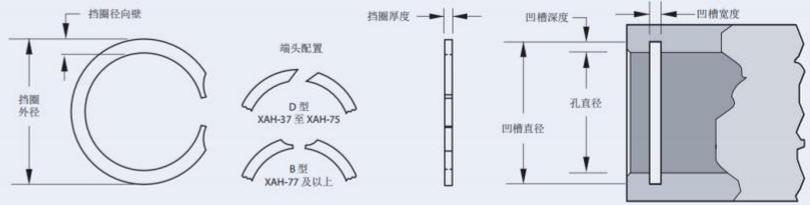
RC-B系列

等截面内挡圈-B端 Equal Section Inner Retaining Ring



RC **0016** - **B**

系列名称 孔直径 端口
Overlap Type (mm) 端口



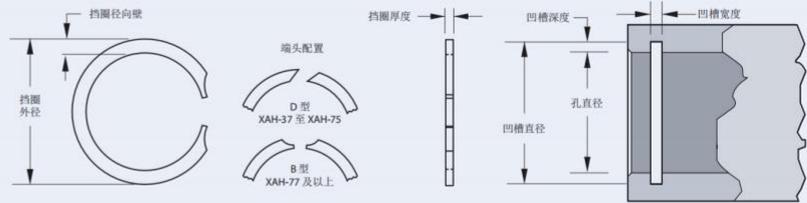
编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength	
	mm	mm	mm	mm	mm	mm	N	N	
RC0010-B	9.53	10.160	+0.50/-0.00	0.889	0.635	10.033	0.711	1179	5224
RC0011-B	11.13	11.862	+0.50/-0.00	0.889	0.635	11.735	0.711	1655	6101
RC0014-B	12.70	13.462	+0.64/-0.00	1.016	0.889	13.310	0.991	1887	9225
RC0015-B	14.27	15.240	+0.64/-0.00	1.219	0.889	14.986	0.991	2474	10373
RC0016-B	15.88	17.018	+0.64/-0.00	1.219	0.889	16.688	0.991	3146	11534
RC0017-B	17.48	18.618	+0.64/-0.00	1.219	0.889	18.288	0.991	3462	12696
RC0019-B	19.05	20.295	+0.64/-0.00	1.219	0.889	19.964	0.991	4245	13840
RC0020-B	19.74	21.006	+0.64/-0.00	1.575	1.067	20.650	1.168	4401	17382
RC0021-B	20.62	22.022	+0.64/-0.00	1.575	1.067	21.641	1.168	5109	18165
RC0022-B	22.23	23.724	+0.64/-0.00	1.575	1.067	23.343	1.168	6056	19571
RC0023-B	22.89	24.409	+0.64/-0.00	1.981	1.067	24.003	1.168	6234	20154
RC0024-B	23.83	25.476	+0.64/-0.00	1.981	1.067	25.044	1.168	7080	20982
RC0025-B	25.40	27.178	+0.64/-0.00	1.981	1.067	26.721	1.168	7547	22370
RC0026-B	25.98	27.788	+0.64/-0.00	2.362	1.067	27.305	1.168	8366	22882
RC0027-B	26.97	28.804	+0.64/-0.00	2.362	1.270	28.296	1.422	8686	27910
RC0029-B	28.58	30.531	+0.64/-0.00	2.362	1.270	29.997	1.422	9910	29566
RC0030-B	30.18	32.258	+0.64/-0.00	2.362	1.270	31.699	1.422	11210	31226
RC0032-B	31.75	33.960	+0.64/-0.00	2.769	1.270	33.376	1.422	12580	32854
RC0033-B	33.32	35.662	+0.64/-0.00	2.769	1.270	35.052	1.422	14031	34483
RC0035-B	34.93	37.389	+0.64/-0.00	2.769	1.270	36.754	1.422	15571	36138
RC0037-B	36.53	38.989	+0.64/-0.00	3.175	1.270	38.354	1.422	16283	37794
RC0038-B	38.10	40.818	+0.64/-0.00	3.175	1.270	40.030	1.422	17929	39423
RC0040-B	39.67	42.367	+0.64/-0.00	3.175	1.575	41.707	1.727	19651	48959
RC0041-B	41.28	44.094	+0.64/-0.00	3.581	1.575	43.409	1.727	21467	50935
RC0042-B	41.99	44.831	+0.64/-0.00	3.581	1.575	44.120	1.727	21836	51811
RC0043-B	42.88	45.822	+0.64/-0.00	3.962	1.575	45.110	1.727	23363	52906
RC0044-B	44.45	47.498	+0.64/-0.00	3.962	1.575	46.787	1.727	25321	54851
RC0046-B	46.02	49.098	+0.64/-0.00	3.962	1.575	48.362	1.727	26219	56795
RC0047-B	46.99	50.165	+0.64/-0.00	3.962	1.575	49.428	1.727	27933	57984

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
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RC-B系列

等截面内挡圈-B端 Equal Section Inner Retaining Ring



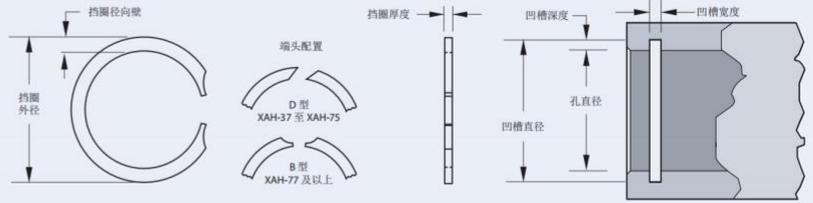
编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RC0048-B	47.63	50.800	3.962	1.575	50.063	1.727	28311	58767
RC0049-B	49.23	52.527	3.962	1.575	51.765	1.727	30478	60743
RC0050-B	49.99	53.289	3.962	1.575	52.527	1.727	30950	61686
RC0051-B	50.80	54.127	3.962	1.575	53.340	1.727	31457	62687
RC0052-B	52.37	55.804	3.962	1.981	55.016	2.184	33727	77835
RC0054-B	53.98	57.404	3.962	1.981	56.617	2.184	34759	80211
RC0056-B	55.58	59.207	4.343	1.981	58.318	2.184	37166	82588
RC0057-B	57.15	60.782	4.343	1.981	59.893	2.184	38217	84928
RC0059-B	58.72	62.459	4.343	1.981	61.570	2.184	40726	87269
RC0060-B	60.33	64.084	4.343	1.981	63.170	2.184	41834	89645
RC0062-B	61.98	65.837	4.750	1.981	64.922	2.184	44513	92102
RC0064-B	63.50	67.386	4.750	1.981	66.446	2.184	45608	94367
RC0065-B	65.07	69.240	4.750	2.362	68.224	2.616	49965	116047
RC0067-B	66.68	70.866	4.750	2.362	69.850	2.616	51193	118900
RC0068-B	68.28	72.542	4.750	2.362	71.526	2.616	52421	121756
RC0069-B	69.01	73.203	4.750	2.362	72.187	2.616	54695	123069
RC0070-B	69.85	74.117	4.750	2.362	73.101	2.616	55362	124564
RC0071-B	71.45	75.819	4.750	2.362	74.803	2.616	58397	127417
RC0072-B	71.98	76.352	4.750	2.362	75.336	2.616	58833	128369
RC0073-B	73.03	77.622	4.750	2.362	76.479	2.616	61495	130225
RC0076-B	76.20	80.797	4.750	2.362	79.654	2.616	64169	135885
RC0078-B	77.77	82.474	5.537	2.769	81.331	3.048	67422	155790
RC0079-B	79.38	84.099	5.537	2.769	82.931	3.048	68810	158994
RC0080-B	80.16	84.887	5.537	2.769	83.718	3.048	69491	160574
RC0083-B	82.55	87.427	5.537	2.769	86.208	3.048	73603	165353
RC0085-B	84.99	89.891	5.537	2.769	88.646	3.048	75779	170239
RC0088-B	88.11	93.040	5.537	2.769	91.770	3.048	78565	176496
RC0089-B	88.90	93.980	6.350	2.769	92.659	3.048	81471	178076

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RC-B系列

等截面内挡圈-B端 Equal Section Inner Retaining Ring



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength	
	mm	mm	mm	mm	mm	mm	N	N	
RC0090-B	89.99	95.123	+1.98/-0.00	6.350	2.769	93.751	3.048	82472	180261
RC0092-B	92.08	97.307		6.350	2.769	95.834	3.048	84376	184435
RC0095-B	95.25	100.635		6.350	2.769	99.111	3.048	89645	190794
RC0098-B	98.43	103.861		6.350	2.769	102.286	3.048	92636	197153
RC0100-B	100.03	105.562		6.350	2.769	103.988	3.048	96618	200357
RC0102-B	101.60	107.213		6.350	2.769	105.562	3.048	98140	203512
RC0105-B	104.78	110.617	+2.36/-0.00	6.350	2.769	108.839	3.048	103801	209871
RC0108-B	107.95	113.919		6.350	2.769	112.014	3.048	106947	216234
RC0110-B	109.98	115.951		6.350	2.769	114.046	3.048	108963	220302
RC0113-B	112.67	118.618		6.350	2.769	116.738	3.048	111628	225695
RC0114-B	114.30	120.498		6.350	2.769	118.466	3.048	116069	228953
RC0117-B	117.48	123.825		6.350	2.769	121.793	3.048	123657	235312
RC0121-B	120.65	127.279	+3.18/-0.00	7.137	2.769	125.120	3.048	131484	241671
RC0127-B	127.00	133.731		7.137	2.769	131.572	3.048	141550	254393
RC0133-B	133.35	140.462		7.925	3.175	138.049	3.531	151927	292507
RC0137-B	136.53	143.764		7.925	3.175	141.351	3.531	160618	299472
RC0140-B	139.70	147.218		7.925	3.175	144.678	3.531	169545	306436
RC0146-B	146.05	153.670		7.925	3.175	151.130	3.531	180866	320364
RC0152-B	152.40	160.249	+3.96/-0.00	7.925	3.175	157.582	3.531	192507	334293
RC0159-B	158.75	166.827		8.712	3.962	164.033	4.420	204460	418879
RC0165-B	165.10	173.533		8.712	3.962	170.485	4.420	216728	435633
RC0168-B	168.28	177.165		8.712	3.962	173.863	4.420	229228	444012
RC0171-B	171.45	180.340		8.712	3.962	177.038	4.420	233554	452387
RC0178-B	177.80	186.690		8.712	3.962	183.388	4.420	242205	469146
RC0184-B	184.15	193.802	+0.15/-0.00	9.525	4.750	190.500	5.309	285063	550260
RC0191-B	190.50	200.406		9.525	4.750	196.850	5.309	294893	569235
RC0203-B	203.20	213.360		9.525	4.750	209.550	5.309	314553	607185
RC0210-B	209.55	220.091		11.100	4.750	216.916	5.309	376283	629577

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
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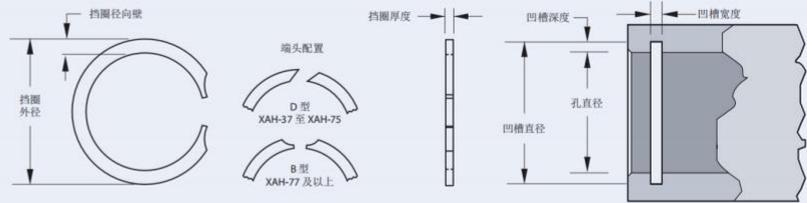


RC-B系列

等截面内挡圈-B端 Equal Section Inner Retaining Ring

RC **0016** - **B**

系列名称 孔直径 端口
Overlap Type (mm) □



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RC0216-B	215.90	226.441	+4.75/-0.00	11.100	223.266	5.309	387684	648659
RC0222-B	222.25	233.807		12.700	230.632	5.309	454136	667736
RC0229-B	228.60	240.157		12.700	236.982	5.309	467108	686813
RC0230-B	230.00	241.529		12.700	238.354	5.309	469965	691009
RC0241-B	241.30	252.857		12.700	249.682	5.309	493060	724972
RC0250-B	249.94	261.493		12.700	258.318	5.309	510709	750915
RC0254-B	254.00	265.557		12.700	262.382	5.309	519012	763126

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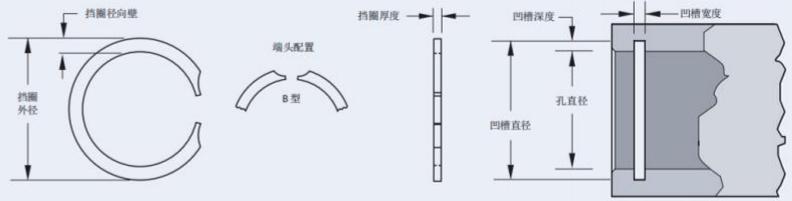
RC-C系列

等截面内挡圈-C端 Equal Section Inner Retaining Ring



RC **0016** - **C**

系列名称 孔直径 端口
Overlap Type (mm)



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RC0029-C	28.58	30.378	2.362	1.067	29.997	1.168	9910	25165
RC0032-C	31.75	33.782	2.362	1.067	33.274	1.168	11797	27959
RC0035-C	34.93	37.084	2.362	1.067	36.449	1.168	12976	30758
RC0038-C	38.10	40.640	3.175	1.067	40.132	1.168	18872	33553
RC0041-C	41.28	43.815	3.175	1.067	43.307	1.168	20448	36348
RC0044-C	44.45	47.117	3.175	1.067	46.482	1.168	22019	39142
RC0048-C	47.63	50.546	3.962	1.067	49.911	1.168	26540	41941
RC0051-C	50.80	53.721	3.962	1.067	53.086	1.168	28311	44736
RC0052-C	52.37	55.296	3.962	1.067	54.661	1.168	29188	46124
RC0056-C	55.55	58.471	3.962	1.067	57.836	1.168	30959	48919
RC0059-C	58.72	61.773	3.962	1.067	61.011	1.168	32725	51713
RC0062-C	61.90	64.948	3.962	1.067	64.186	1.168	34496	54513
RC0065-C	65.07	68.123	3.962	1.067	67.361	1.168	36263	57307
RC0076-C	76.20	80.112	4.750	1.575	79.350	1.727	58509	94029
RC0083-C	82.55	86.462	4.750	1.575	85.700	1.727	63381	101865
RC0089-C	88.90	92.812	4.750	1.575	92.050	1.727	68259	109701
RC0095-C	95.25	99.162	4.750	1.575	98.400	1.727	73131	117538
RC0102-C	101.60	105.537	4.750	1.575	104.775	1.727	78636	125374
RC0108-C	107.95	112.497	5.537	1.981	111.608	2.184	96254	160423
RC0114-C	114.30	118.847	5.537	1.981	117.958	2.184	101914	169857
RC0121-C	120.65	125.197	5.537	1.981	124.308	2.184	107579	179295
RC0127-C	127.00	131.674	5.537	1.981	130.658	2.184	113239	188733
RC0133-C	133.35	138.024	5.537	1.981	137.008	2.184	118900	198167
RC0146-C	146.05	150.724	5.537	1.981	149.708	2.184	130225	217040
RC0152-C	152.40	157.988	6.350	2.362	156.464	2.616	150984	271775
RC0165-C	165.10	170.942	6.350	2.362	169.164	2.616	163569	294421
RC0178-C	177.80	183.896	6.350	2.362	181.864	2.616	176149	317067

PS:基于45,000psi的凹槽材料屈服强度和安全系数，直角边缘线材
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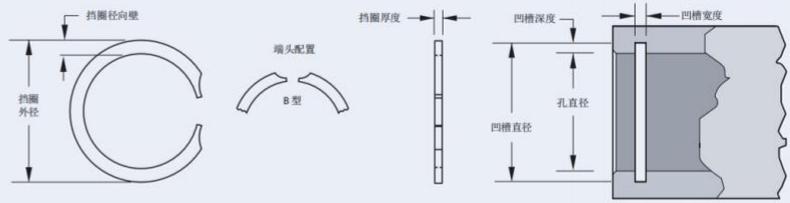


RC-C系列

等截面内挡圈-C端 Equal Section Inner Retaining Ring

RC **0016** - **C**

系列名称 孔直径 端□
Overlap Type (mm)



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RC0184-C	184.15	190.500	6.350	2.362	188.214	2.616	182441	328392
RC0191-C	190.50	197.104	6.350	2.362	194.564	2.616	188733	339717
RC0203-C	203.20	210.439	6.350	2.362	207.264	2.616	201314	362364

PS:基于45,000psi的凹槽材料屈服强度和安全系数，直角边缘线材
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What is 螺旋型 A RETAINING RING?

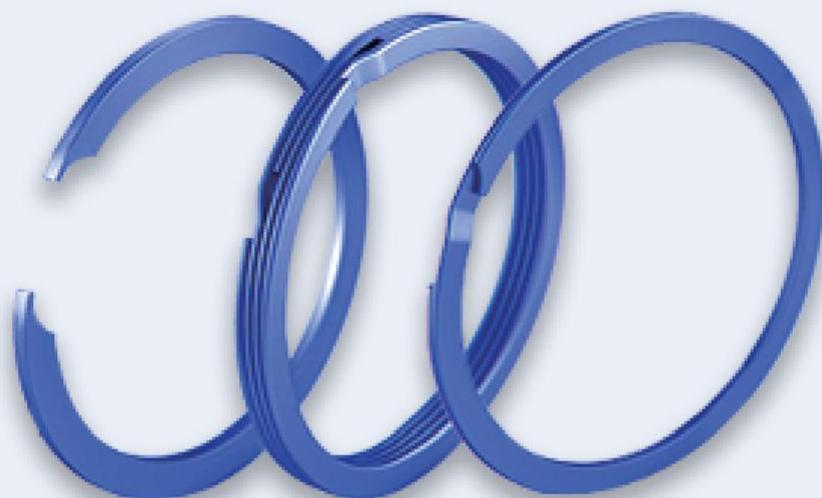
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RL'系列

螺旋外挡圈-轻负荷 Spiral Outer Retaining Ring



没有凸耳



种类多样



自由定制



RL'系列

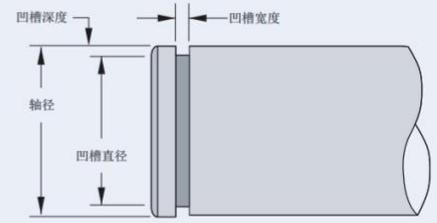
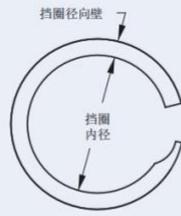
螺旋外挡圈-轻负荷 Spiral Outer Retaining Ring



RL' - 0016

系列名称
Overlap Type

轴直径
(mm)



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RL'-0006	6	5.65	0.51	0.30	5.70	0.38	439	1988
RL'-0007	7	6.58	0.51	0.30	6.64	0.38	614	2234
RL'-0008	8	7.52	0.64	0.38	7.60	0.46	780	3183
RL'-0009	9	8.42	0.76	0.38	8.50	0.46	1114	3580
RL'-0010	10	9.32	0.76	0.38	9.40	0.46	1462	3978
RL'-0011	11	10.32	0.89	0.38	10.40	0.46	1608	4376
RL'-0012	12	11.22	0.89	0.38	11.34	0.46	1930	5779
RL'-0013	13	12.15	1.14	0.46	12.28	0.56	2281	6261
RL'-0014	14	13.15	1.14	0.46	13.28	0.56	2456	6742
RL'-0015	15	14.14	1.14	0.46	14.28	0.56	2632	7224
RL'-0016	16	15.13	1.14	0.46	15.28	0.56	2807	7705
RL'-0017	17	16.13	1.14	0.46	16.28	0.56	2983	8187
RL'-0018	18	17.12	1.14	0.46	17.28	0.56	3158	8669
RL'-0019	19	18.11	1.14	0.46	18.28	0.56	3334	9150
RL'-0020	20	19.10	1.65	0.53	19.28	0.66	3509	9632
RL'-0021	21	19.74	1.65	0.53	19.94	0.66	5424	11652
RL'-0022	22	20.73	1.65	0.53	20.94	0.66	5683	12207
RL'-0024	24	22.72	1.65	0.53	22.94	0.66	6199	13317
RL'-0025	25	23.71	1.65	0.53	23.94	0.66	6458	13872
RL'-0026	26	24.63	1.65	0.53	24.88	0.66	7096	15138
RL'-0028	28	26.62	2.24	0.64	26.88	0.79	7642	16303
RL'-0029	29	27.61	2.24	0.64	27.88	0.79	7915	16885
RL'-0030	30	28.59	2.24	0.64	28.88	0.79	8188	17467
RL'-0032	32	30.57	2.24	0.64	30.88	0.79	8734	18632
RL'-0034	34	32.56	2.24	0.64	32.88	0.79	9279	19796
RL'-0035	35	33.55	2.24	0.64	33.88	0.79	9552	20378
RL'-0036	36	34.54	2.24	0.64	34.88	0.79	9825	20960

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
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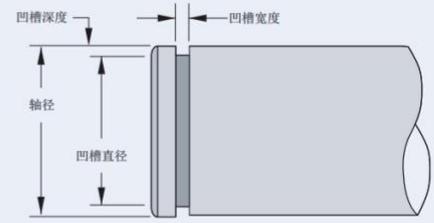
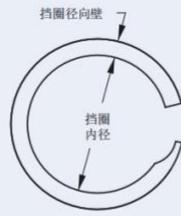
RL'系列

螺旋外挡圈-轻负荷 Spiral Outer Retaining Ring

RL' - 0016

系列名称
Overlap Type

轴直径
(mm)



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RL'-0036	36	34.54	2.24	0.64	34.88	0.79	9825	20960
RL'-0038	38	36.52	2.24	0.64	36.88	0.79	10371	22125
RL'-0040	40	38.09	3.00	0.79	38.52	0.99	14426	28748
RL'-0042	42	40.07	3.00	0.79	40.52	0.99	15147	30185
RL'-0045	45	43.04	3.00	0.79	43.52	0.99	16229	32341
RL'-0048	48	46.01	3.00	0.79	46.52	0.99	17311	34497
RL'-0050	50	47.99	3.00	0.79	48.52	0.99	18032	35935
RL'-0052	52	49.48	4.01	0.79	50.06	0.99	24583	37372
RL'-0055	55	52.46	4.01	0.79	53.06	0.99	26001	39528
RL'-0056	56	53.44	4.01	0.79	54.06	0.99	26473	40247
RL'-0058	58	55.42	4.01	0.79	56.06	0.99	27419	41684
RL'-0060	60	57.40	4.01	0.79	58.06	0.99	28364	43122
RL'-0062	62	59.37	4.01	0.79	60.06	0.99	29310	44559
RL'-0063	63	60.35	4.01	0.79	61.06	0.99	29783	45278
RL'-0065	65	62.33	4.01	0.79	63.06	0.99	30728	46715
RL'-0068	68	65.31	4.01	0.79	66.06	0.99	32146	48871
RL'-0070	70	67.29	4.01	0.79	68.06	0.99	33092	50309
RL'-0072	72	69.27	4.01	0.79	70.06	0.99	34037	51746
RL'-0075	75	72.25	4.01	0.79	73.06	0.99	35456	53902
RL'-0078	78	74.85	4.78	0.99	75.66	1.12	44477	70250
RL'-0080	80	76.82	4.78	0.99	77.66	1.12	45617	72052
RL'-0082	82	78.79	4.78	0.99	79.66	1.12	46757	73853
RL'-0085	85	81.76	4.78	0.99	82.66	1.12	48468	76555
RL'-0088	88	84.73	4.78	0.99	85.66	1.12	50179	79257
RL'-0090	90	86.69	4.78	0.99	87.66	1.12	51319	81058
RL'-0095	95	91.66	4.78	0.99	92.66	1.12	54170	85561
RL'-0100	100	96.62	4.78	0.99	97.66	1.12	57021	90064

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RL'系列

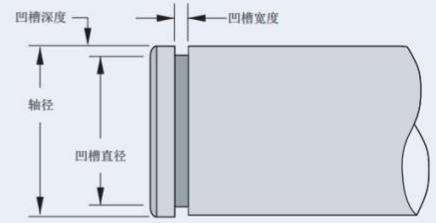
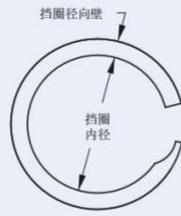
螺旋外挡圈-轻负荷 Spiral Outer Retaining Ring



RL' - 0016

系列名称
Overlap Type

轴直径
(mm)



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RL'-0105	105	101.13	5.72	1.17	102.20	1.32	71642	106440
RL'-0110	110	106.08	5.72	1.17	107.20	1.32	75054	111508
RL'-0115	115	111.03	5.72	1.17	112.20	1.32	78465	116577
RL'-0120	120	115.98	5.72	1.17	117.20	1.32	81877	121645
RL'-0125	125	120.93	5.72	1.17	122.20	1.32	85288	126714
RL'-0130	130	125.88	5.72	1.17	127.20	1.32	88700	131783
RL'-0135	135	130.31	5.72	1.55	131.63	1.70	111027	181299
RL'-0140	140	135.13	5.72	1.55	136.50	1.70	119404	188013
RL'-0145	145	139.95	5.72	1.55	141.37	1.70	127974	194907
RL'-0150	150	144.83	6.73	1.55	146.25	1.70	137070	201443
RL'-0155	155	149.66	6.73	1.55	151.13	1.70	146361	208158
RL'-0160	160	154.44	6.73	1.55	156.00	1.70	155956	214872
RL'-0165	165	159.27	6.73	1.55	160.88	1.70	165855	221587
RL'-0170	170	164.09	6.73	1.55	165.75	1.70	176059	228302
RL'-0175	175	168.92	6.73	1.55	170.63	1.70	186568	235017
RL'-0180	180	173.75	6.73	1.55	175.50	1.70	197381	241731
RL'-0185	185	178.57	6.73	1.55	180.38	1.70	208499	248446
RL'-0190	190	183.40	6.73	1.55	185.25	1.70	219922	255161
RL'-0195	195	188.22	7.62	1.55	190.13	1.70	231649	261876
RL'-0200	200	193.05	7.62	1.55	195.00	1.70	243681	268590
RL'-0210	210	202.70	7.62	1.55	204.75	1.70	268658	351160
RL'-0220	220	212.36	8.76	1.93	214.50	2.08	294854	367882
RL'-0230	230	222.01	8.76	1.93	224.25	2.08	322268	384604

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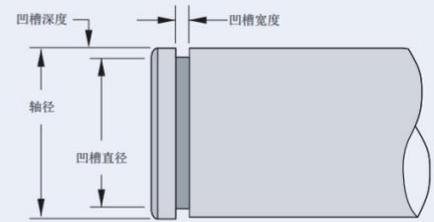
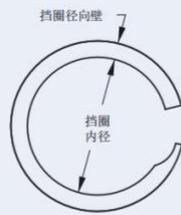
RL'系列

螺旋外挡圈-轻负荷 Spiral Outer Retaining Ring

RL' - 0016

系列名称
Overlap Type

轴直径
(mm)



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength	
	mm	mm	mm	mm	mm	mm	N	N	
RL'-0240	240	231.66	8.76	±0.15	1.93	234.00	2.08	350900	401326
RL'-0250	250	241.31	8.76	±0.15	1.93	243.75	2.08	380751	418048
RL'-0260	260	250.97	9.65	±0.15	1.93	253.50	2.08	411821	434770
RL'-0270	270	260.62	9.65	±0.15	1.93	263.25	2.08	444108	451492
RL'-0280	280	270.27	9.65	±0.15	1.93	273.00	2.08	477614	468214
RL'-0290	290	279.92	9.65	±0.15	1.93	282.75	2.08	512339	484936
RL'-0300	300	289.58	9.65	±0.15	1.93	292.50	2.08	548282	501658

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What is 螺旋型 A RETAINING RING?

我们提供几千多种标准挡圈，备有碳素钢和不锈钢材质的现货。如果需要定制设计，可以利用无模具成本制造工艺：无论何种应用，我们都可提供具有成本效益和创新的设计解决方案。

We provide more than thousands of standard retaining rings, with carbon steel and stainless steel in stock. If you need custom design, you can use the cost-free manufacturing process: no matter what the application, we can provide cost-effective and innovative design solutions.



RM'系列

螺旋外挡圈-中负荷 Spiral Outer Retaining Ring



没有凸耳



种类多样



自由定制



RM'系列

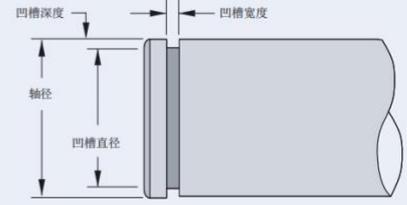
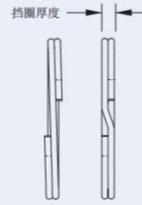
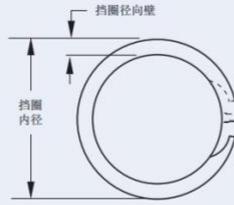
螺旋外挡圈-中负荷 Spiral Outer Retaining Ring



RM' - 0016

系列名称
Overlap Type

轴直径
(mm)



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RM'-0013	12.70	11.862	1.143	0.635	12.040	0.762	2047	8900
RM'-0014	14.27	13.437	1.143	0.635	13.614	0.762	2314	10013
RM'-0015	15.09	14.249	1.143	0.635	14.453	0.762	2448	10591
RM'-0016	15.88	14.859	1.143	0.635	15.088	0.762	3160	11125
RM'-0017	16.66	15.672	1.143	0.635	15.875	0.762	3293	11704
RM'-0018	18.24	17.247	1.143	0.635	17.450	0.762	3605	12816
RM'-0019	19.05	18.034	1.651	0.787	18.263	0.914	3783	14952
RM'-0020	19.74	18.821	1.651	0.787	19.050	0.914	3916	15575
RM'-0021	20.62	19.583	1.651	0.787	19.837	0.914	4094	16198
RM'-0022	22.00	21.031	1.651	0.787	21.285	0.914	5251	17444
RM'-0023	23.01	21.844	1.651	0.787	22.073	0.914	5429	18067
RM'-0024	23.83	22.581	1.651	0.787	22.860	0.914	5607	18690
RM'-0025	24.59	23.266	1.905	0.940	23.495	1.067	6408	23051
RM'-0026	25.98	24.587	1.905	0.940	24.892	1.067	6764	24342
RM'-0027	26.97	25.578	1.905	0.940	25.908	1.067	7031	25276
RM'-0028	27.76	26.416	1.905	0.940	26.695	1.067	7209	25988
RM'-0029	28.58	27.178	1.905	0.940	27.508	1.067	7432	26789
RM'-0030	30.18	28.626	2.159	1.092	28.956	1.219	8989	32841
RM'-0031	30.94	29.439	2.159	1.092	29.718	1.219	9212	33687
RM'-0032	31.75	30.175	2.159	1.092	30.531	1.219	9434	34577
RM'-0033	32.54	31.013	2.159	1.092	31.318	1.219	9657	35422
RM'-0034	34.11	32.563	2.159	1.092	32.893	1.219	10146	37158
RM'-0035	34.93	33.223	2.413	1.092	33.604	1.219	11259	38003
RM'-0036	35.71	34.036	2.413	1.092	34.392	1.219	11481	38893
RM'-0037	36.50	34.798	2.413	1.092	35.179	1.219	11748	39739
RM'-0038	38.10	36.398	2.413	1.092	36.779	1.219	12282	41474

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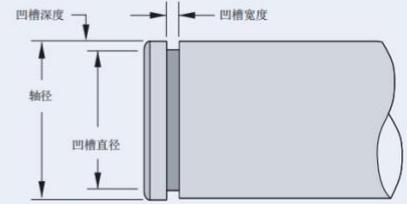
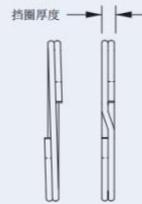
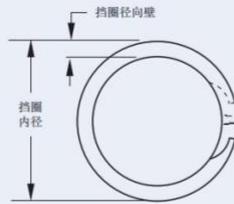
RM'系列

螺旋外挡圈-中负荷 Spiral Outer Retaining Ring

RM' - 0016

系列名称
Overlap Type

轴直径
(mm)



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RM'-0040	39.67	37.846	2.743	1.245	38.278	1.422	13751	44945
RM'-0041	41.28	39.345	2.743	1.245	39.776	1.422	15353	46770
RM'-0043	42.85	40.894	2.997	1.245	41.351	1.422	15931	48550
RM'-0044	44.45	42.494	2.997	1.245	42.951	1.422	16510	50330
RM'-0046	46.05	43.942	2.997	1.245	44.425	1.422	18245	52154
RM'-0048	47.63	45.441	2.997	1.245	45.923	1.422	20070	53934
RM'-0049	49.23	46.838	2.997	1.245	47.269	1.422	20737	55759
RM'-0051	50.80	48.489	3.251	1.245	48.997	1.422	22028	57539
RM'-0052	51.99	50.063	3.251	1.245	50.597	1.422	22695	59319
RM'-0054	53.98	51.537	3.251	1.245	52.095	1.422	24742	61143
RM'-0055	54.99	52.578	3.505	1.245	53.11	1.422	25187	62300
RM'-0056	55.58	53.137	3.505	1.245	53.67	1.422	25454	62968
RM'-0057	57.15	54.686	3.505	1.245	55.27	1.422	26211	64748
RM'-0059	58.72	56.159	3.505	1.245	56.74	1.422	28347	66528
RM'-0060	60.33	57.734	3.505	1.245	58.34	1.422	29148	68352
RM'-0062	61.90	59.207	3.759	1.245	59.82	1.422	31417	70132
RM'-0064	63.50	60.808	3.759	1.245	61.42	1.422	32263	71912
RM'-0065	65.07	62.281	3.759	1.245	62.89	1.422	34666	73692
RM'-0067	66.68	63.856	3.759	1.245	64.49	1.422	35511	75517
RM'-0068	68.00	65.329	4.013	1.245	65.96	1.422	38048	77341
RM'-0070	69.85	66.929	4.013	1.245	67.56	1.422	38938	79121
RM'-0071	71.45	68.478	4.013	1.245	69.14	1.422	39828	80946
RM'-0073	73.03	69.977	4.267	1.245	70.64	1.422	42498	82726
RM'-0075	74.60	71.552	4.267	1.245	72.21	1.422	43432	84506
RM'-0076	76.20	73.076	4.267	1.549	73.76	1.727	45301	107468
RM'-0078	77.77	74.625	4.267	1.549	75.34	1.727	46236	109693
RM'-0079	79.38	76.200	4.521	1.549	76.89	1.727	48149	111918
RM'-0080	79.98	76.784	4.521	1.549	77.50	1.727	48550	112808

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RM'系列

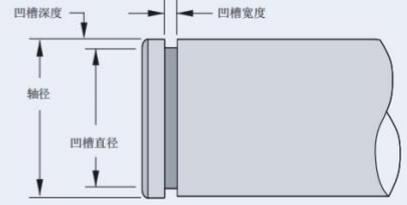
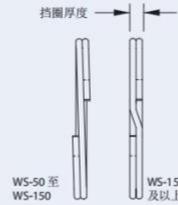
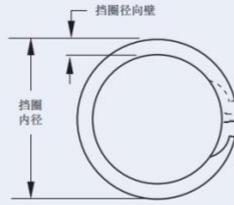
螺旋外挡圈-中负荷 Spiral Outer Retaining Ring



RM' - 0016

系列名称
Overlap Type

轴直径
(mm)



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RM'-0081	80.95	77.749	4.521	1.549	78.46	1.727	49128	114143
RM'-0083	82.55	79.273	4.521	1.549	80.01	1.727	51131	116412
RM'-0084	84.12	80.772	4.775	1.549	81.48	1.727	54157	118637
RM'-0085	84.99	81.534	4.775	1.549	82.27	1.727	54691	119750
RM'-0086	85.73	82.347	4.775	1.549	83.08	1.727	55225	120907
RM'-0087	87.30	83.845	4.775	1.549	84.61	1.727	57316	123087
RM'-0089	88.90	85.420	4.775	1.549	86.21	1.727	58340	125357
RM'-0090	89.99	86.411	5.029	1.549	87.20	1.727	61277	126914
RM'-0092	92.08	88.468	5.029	1.549	89.28	1.727	62701	129851
RM'-0094	93.65	89.992	5.029	1.549	90.81	1.727	64970	132076
RM'-0095	95.00	91.364	5.029	1.549	92.15	1.727	65860	133945
RM'-0097	96.82	93.167	5.283	1.549	93.98	1.727	67151	136526
RM'-0098	98.43	94.590	5.283	1.549	95.43	1.727	71912	138796
RM'-0100	100.03	96.114	5.283	1.549	97.03	1.727	73069	141065
RM'-0102	101.60	97.587	5.537	1.549	98.45	1.727	78009	143290
RM'-0103	103.20	99.212	5.537	1.549	100.05	1.727	79255	145515
RM'-0105	104.78	100.762	5.537	1.549	101.60	1.727	80456	147740
RM'-0106	106.38	102.362	5.537	1.549	103.07	1.727	85618	150010
RM'-0108	107.95	103.734	5.791	1.549	104.65	1.727	86909	152235
RM'-0110	109.52	105.334	5.791	1.549	106.22	1.727	88155	154460
RM'-0111	111.13	106.883	5.791	1.549	107.82	1.727	89445	156685
RM'-0113	112.70	108.483	6.045	1.549	109.40	1.727	90736	158910
RM'-0114	114.30	109.880	6.045	1.549	110.85	1.727	96254	161179
RM'-0116	115.87	111.354	6.045	1.549	112.32	1.727	100437	192863
RM'-0117	117.48	112.954	6.350	1.829	113.92	2.007	101861	195533
RM'-0119	119.05	114.503	6.350	1.829	115.49	2.007	103196	198159
RM'-0120	119.99	115.468	6.350	1.829	116.43	2.007	103997	199716
RM'-0121	120.65	116.103	6.350	1.829	117.09	2.007	104575	200829

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
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RM'系列

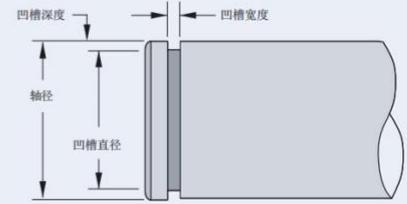
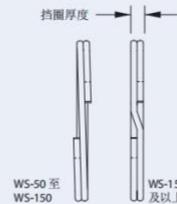
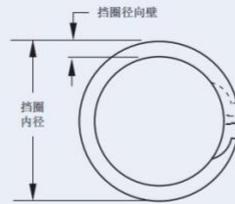
螺旋外挡圈-中负荷 Spiral Outer Retaining Ring



RM' - 0016

系列名称
Overlap Type

轴直径
(mm)



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RM'-0122	122.22	117.678	6.350	1.829	118.67	2.007	105955	203454
RM'-0124	123.83	119.253	6.350	1.829	120.27	2.007	107334	206080
RM'-0125	124.99	120.828	6.350	1.829	121.84	2.007	108714	208705
RM'-0127	127.00	122.428	6.350	1.829	123.34	2.007	113253	211375
RM'-0130	130.00	125.324	6.350	1.829	126.34	2.007	115923	216359
RM'-0133	133.35	128.626	6.350	1.829	129.72	2.007	118904	221966
RM'-0137	136.53	131.750	6.350	1.829	132.79	2.007	125134	227217
RM'-0140	139.70	134.823	6.350	1.829	135.97	2.007	128027	232513
RM'-0143	142.88	137.998	6.350	1.829	139.14	2.007	130919	237808
RM'-0146	146.05	140.970	6.350	1.829	142.16	2.007	139285	243104

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What is 螺旋型 A RETAINING RING?

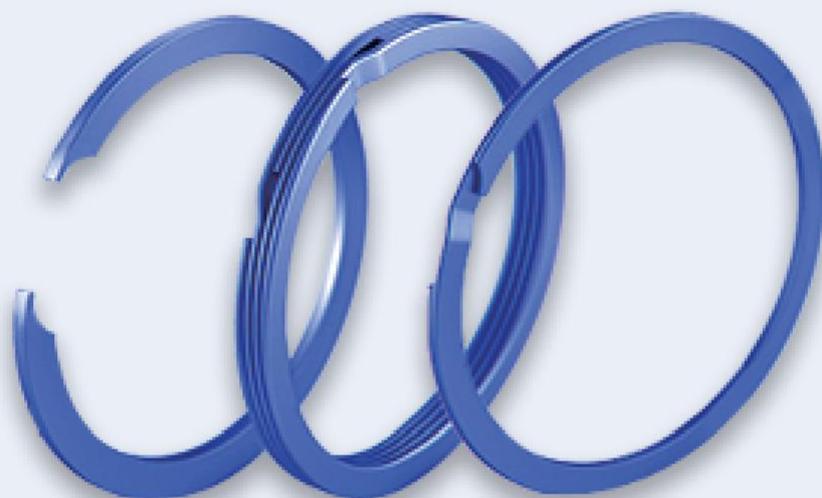
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We provide more than thousands of standard retaining rings, with carbon steel and stainless steel in stock. If you need custom design, you can use the cost-free manufacturing process: no matter what the application, we can provide cost-effective and innovative design solutions.



RMH'系列

螺旋外挡圈-中重负荷 Spiral Outer Retaining Ring



没有凸耳



种类多样



自由定制



RMH'系列

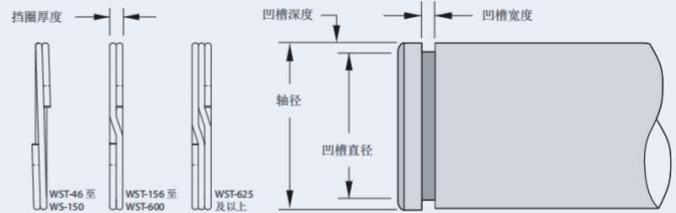
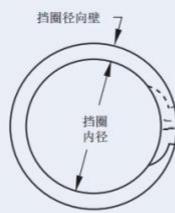
螺旋外挡圈-中重负荷 Spiral Outer Retaining Ring



RMH' - 0016

系列名称
Overlap Type

轴直径
(mm)



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RMH'-0012	11.91	11.074	1.143	0.635	11.252	±0.0	1914	8010
RMH'-0013	12.70	11.913	1.143	0.889	12.040	5	2047	11259
RMH'-0014	14.27	13.437	1.143	0.889	13.589		2492	12638
RMH'-0016	15.88	14.986	1.143	0.889	15.138		2937	14062
RMH'-0017	17.48	16.459	1.397	0.889	16.637		3694	18601
RMH'-0019	19.05	17.983	1.397	0.889	18.161		4228	20248
RMH'-0020	19.74	18.745	1.651	1.067	18.923		4406	21093
RMH'-0021	20.62	19.507	1.651	1.067	19.710		4584	21939
RMH'-0022	22.00	21.006	1.651	1.067	21.209		5518	23630
RMH'-0024	23.83	22.504	1.905	1.067	22.708		6497	25321
RMH'-0025	25.40	24.054	1.905	1.067	24.257		7254	27012
RMH'-0026	25.98	24.613	1.905	1.067	24.816		7387	27635
RMH'-0027	26.97	25.527	1.981	1.270	25.781		8010	31195
RMH'-0029	28.58	27.026	1.981	1.270	27.305		8856	33019
RMH'-0030	30.18	28.600	2.235	1.270	28.829		10102	32797
RMH'-0032	31.75	30.074	2.362	1.270	30.353		10992	36713
RMH'-0033	33.32	31.496	2.362	1.270	31.750		12816	38537
RMH'-0035	34.93	32.969	2.489	1.270	33.274		14285	40362
RMH'-0037	36.53	34.519	2.616	1.270	34.798		15397	42231
RMH'-0038	38.10	36.043	2.743	1.270	36.322		16510	44055
RMH'-0040	39.67	37.490	2.870	1.575	37.846		17711	56871
RMH'-0041	41.28	39.040	2.870	1.575	39.370		19447	59141
RMH'-0043	42.88	40.589	2.997	1.575	40.894		20693	61410
RMH'-0044	44.45	42.088	2.997	1.575	42.418		22028	63724
RMH'-0046	46.02	43.536	3.124	1.575	43.942		23363	65949
RMH'-0048	47.63	45.060	3.251	1.575	45.466		25365	68263
RMH'-0049	49.23	47.346	3.251	1.575	47.727		27857	71690

PS:基于45,000psi的凹槽材料屈服强度和安全系数，直角边缘线材
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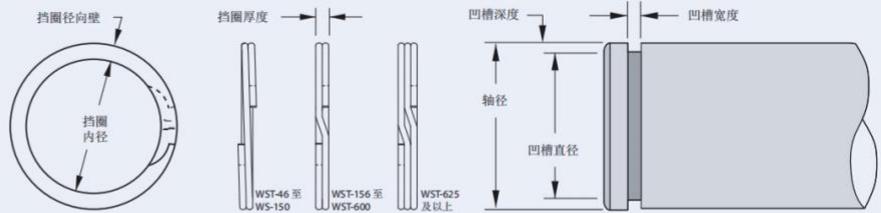
RMH'系列

螺旋外挡圈-中重负荷 Spiral Outer Retaining Ring

RMH' - 0016

系列名称
Overlap Type

轴直径
(mm)



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RMH'-0051	50.80	48.108	3.505	1.575	48.514	1.727	28302	72802
RMH'-0052	52.37	49.657	3.581	1.981	50.038	2.184	29860	94429
RMH'-0054	53.98	51.105	3.581	1.981	51.486	2.184	32752	97322
RMH'-0056	55.58	51.841	3.581	1.981	52.248	2.184	33909	98746
RMH'-0057	57.15	54.077	3.581	1.981	54.483	2.184	37514	103062
RMH'-0059	58.72	55.575	4.775	1.981	56.007	2.184	39294	105910
RMH'-0060	60.33	57.099	4.775	1.981	57.531	2.184	41074	108758
RMH'-0062	61.98	58.598	4.775	1.981	59.055	2.184	42943	111606
RMH'-0064	63.50	60.096	4.775	1.981	60.579	2.184	45613	114499
RMH'-0065	65.07	61.570	4.775	2.362	62.052	2.616	46681	117213
RMH'-0067	66.68	63.119	4.775	2.362	63.627	2.616	49529	120239
RMH'-0068	68.28	64.643	4.775	2.362	65.151	2.616	51576	123087
RMH'-0070	69.85	66.142	4.775	2.362	66.675	2.616	54513	143023
RMH'-0073	73.03	69.139	4.775	2.362	69.647	2.616	60609	149520
RMH'-0076	76.20	72.085	4.775	2.362	72.644	2.616	66038	156017
RMH'-0078	77.77	73.584	6.350	2.819	74.168	3.048	68397	159266
RMH'-0079	79.38	75.108	6.350	2.819	75.692	3.048	71779	162514
RMH'-0080	80.16	75.844	6.350	2.819	76.454	3.048	72491	164116
RMH'-0083	82.55	78.105	6.350	2.819	78.740	3.048	76674	169011
RMH'-0085	84.99	80.366	6.350	2.819	81.026	3.048	80990	173906
RMH'-0088	87.99	82.652	6.350	2.819	83.312	3.048	85396	178757
RMH'-0089	88.90	84.201	6.350	2.819	84.836	3.048	88066	217249
RMH'-0090	89.99	85.242	6.350	2.819	85.877	3.048	90291	219919
RMH'-0092	92.08	87.198	6.350	2.819	87.833	3.048	95764	224992
RMH'-0095	95.25	90.170	6.350	2.819	90.856	3.048	102617	232780
RMH'-0098	98.43	93.218	6.350	2.819	93.878	3.048	109693	240523
RMH'-0100	100.03	94.742	6.350	2.819	95.402	3.048	112719	244439
RMH'-0102	101.60	96.190	6.350	2.819	96.901	3.048	117035	248310

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
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RMH'系列

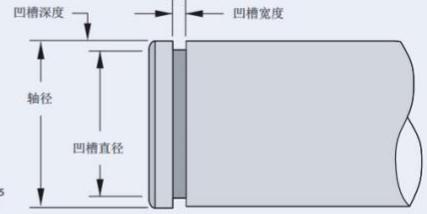
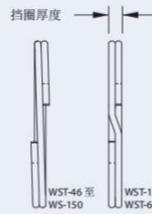
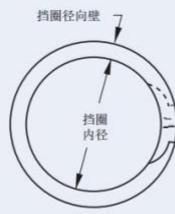
螺旋外挡圈-中重负荷 Spiral Outer Retaining Ring



RMH' - 0016

系列名称
Overlap Type

轴直径
(mm)



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RMH'-0108	107.95	102.413	7.925	2.819	103.251	3.048	124333	263796
RMH'-0110	109.98	105.715	7.925	2.819	106.426	3.048	127982	271584
RMH'-0114	114.30	108.712	7.925	2.819	109.474	3.048	134479	279327
RMH'-0121	120.65	114.681	7.925	2.819	115.570	3.048	149431	294857
RMH'-0127	127.00	120.777	7.925	2.819	121.666	3.048	165140	310343
RMH'-0133	133.35	126.873	9.525	3.226	127.762	3.531	181649	372866
RMH'-0140	139.70	132.817	9.525	3.226	133.731	3.531	204166	390621
RMH'-0146	146.05	138.836	9.525	3.226	139.827	3.531	222456	408377
RMH'-0152	152.40	144.907	25.400	3.226	145.923	3.531	241591	426132
三层								
RMH'-0159	158.75	150.927	7.925	4.191	152.019	4.420	261482	576676
RMH'-0165	165.10	157.023	7.925	4.191	158.115	4.420	282175	599771
RMH'-0171	171.45	163.068	7.925	4.191	164.211	4.420	303624	622822
RMH'-0178	177.80	169.113	7.925	4.191	170.307	4.420	325874	645873
RMH'-0184	184.15	175.108	9.525	4.801	176.327	5.309	348391	766246
RMH'-0191	190.50	181.102	9.525	4.801	182.372	5.309	377449	792679
RMH'-0197	196.85	187.147	9.525	4.801	188.468	5.309	402236	819112
RMH'-0203	203.20	193.218	9.525	4.801	194.564	5.309	427779	845500
RMH'-0210	209.55	199.263	9.525	4.801	200.660	5.309	454123	871933
RMH'-0216	215.90	205.308	9.525	4.801	206.756	5.309	481268	898366
RMH'-0222	222.25	211.353	9.525	4.801	212.928	5.309	506410	924799

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
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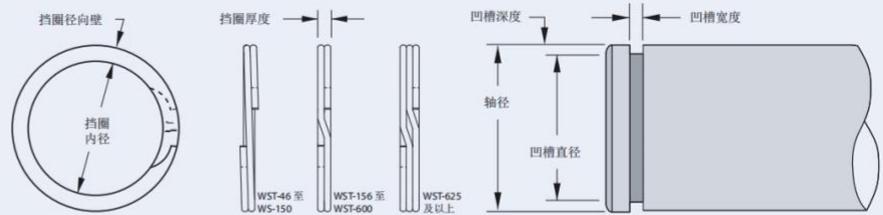
RMH'系列

螺旋外挡圈-中重负荷 Spiral Outer Retaining Ring

RMH' - 0016

系列名称
Overlap Type

轴直径
(mm)



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RMH'-0229	228.60	217.424	9.525	4.801	218.948	5.309	537872	951188
RMH'-0235	234.95	223.469	9.525	4.801	225.044	5.309	567375	977621
RMH'-0241	241.30	229.514	9.525	4.801	231.140	5.309	597635	1004054
RMH'-0248	247.65	235.534	9.525	4.801	237.185	5.309	631767	1030487
RMH'-0254	254.00	241.503	9.525	4.801	243.205	5.309	669992	1056875

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What is 螺旋型 A RETAINING RING?

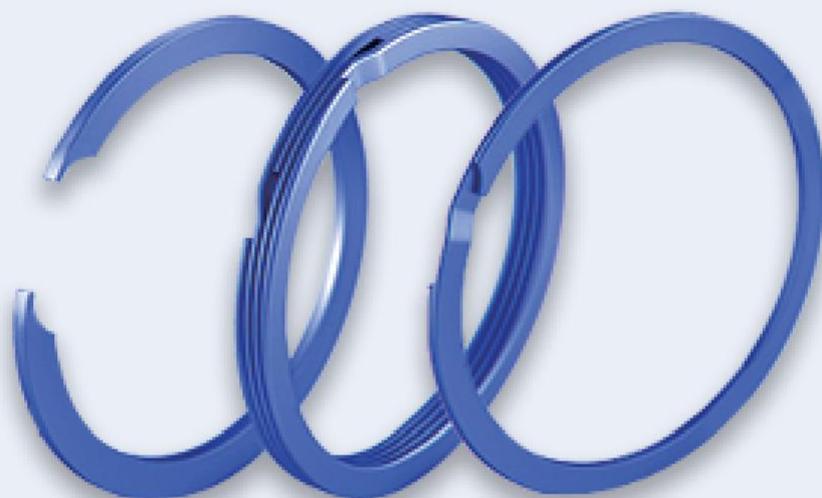
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RH'系列

螺旋外挡圈-重负荷 Spiral Outer Retaining Ring



没有凸耳



种类多样



自由定制



RH'系列

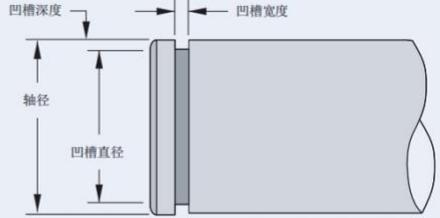
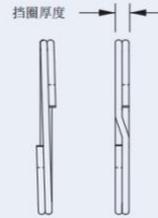
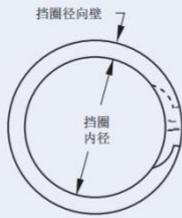
螺旋外挡圈-重负荷 Spiral Outer Retaining Ring



RH' - 0016

系列名称
Overlap Type

轴直径
(mm)



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RH'-0006	6.35	5.791		0.510	5.842	0.510	788	4276
RH'-0008	7.92	7.290		0.380	7.366	0.510	1081	5340
RH'-0010	9.53	8.865	+0.25/±0.00	0.640	8.941	0.740	1357	6417
RH'-0011	11.10	10.389	+0.30	0.640	10.465	0.740	1718	7476
RH'-0013	12.70	11.786		0.890	11.887	0.990	2537	11259
RH'-0014	14.27	13.056		0.890	13.183	0.990	2759	12416
RH'-0016	15.88	14.808		0.890	14.935	0.990	3738	14062
RH'-0017	17.48	15.824		0.890	15.977	0.990	4228	15041
RH'-0019	19.05	17.729		1.070	17.882	0.990	5429	20248
RH'-0020	19.74	18.466		1.070	18.618	1.170	5919	21093
RH'-0021	20.62	19.202		1.070	19.355	1.170	6408	21939
RH'-0022	22.00	20.676		1.070	20.853	1.170	7432	23630
RH'-0024	23.83	22.225	+0.35/±0.00	1.070	22.403	1.170	8277	25321
RH'-0025	25.40	23.343		1.070	23.520	1.170	8989	26567
RH'-0026	25.98	24.206		1.070	24.409	1.170	9968	27635
RH'-0027	26.97	25.044		1.270	25.349	1.420	10680	31195
RH'-0029	28.58	26.594		1.270	26.899	1.420	11659	33019
RH'-0030	30.18	28.067		1.270	28.397	1.420	13083	34888
RH'-0032	31.75	29.540		1.270	29.870	1.420	14552	36713
RH'-0033	33.32	30.937		1.270	31.293	1.420	16510	38537
RH'-0035	34.93	32.436		1.270	32.791	1.420	18156	40362
RH'-0037	36.55	33.934		1.270	34.290	1.420	19892	42231
RH'-0038	38.10	35.179		1.270	35.712	1.420	22161	44055
RH'-0040	39.67	36.906		1.570	37.287	1.730	23096	56871
RH'-0041	41.28	38.430		1.570	38.837	1.730	24520	59141

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
您想要的各材料, 各规格挡圈, 我们都可为您定做, 详细请咨询客户顾问



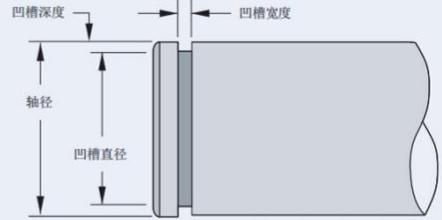
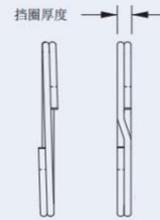
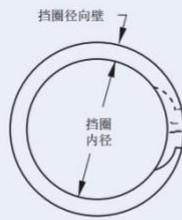
RH'系列

螺旋外挡圈-重负荷 Spiral Outer Retaining Ring

RH' - 0016

系列名称
Overlap Type

轴直径
(mm)



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RH'-0043	42.88	39.954	3.250	1.570	40.361	1.730	25988	61410
RH'-0044	44.45	41.478	3.250	1.570	41.910	1.730	27546	63724
RH'-0046	46.02	42.926	3.250	1.570	43.383	1.730	29637	65949
RH'-0048	47.63	44.475	4.010	1.570	44.933	1.730	31239	68263
RH'-0049	49.23	46.685	4.010	1.570	47.168	1.730	34666	71690
RH'-0051	50.80	47.422	4.010	1.570	47.904	1.730	35867	72802
RH'-0052	52.37	49.073	4.270	1.980	49.428	2.180	37603	94429
RH'-0054	53.98	50.521	4.270	1.980	50.876	2.180	40762	97322
RH'-0056	55.58	51.257	4.270	1.980	51.613	2.180	42053	98746
RH'-0057	57.15	53.467	4.270	1.980	53.848	2.180	46013	103062
RH'-0059	58.72	54.940	5.080	1.980	55.321	2.180	48728	105910
RH'-0060	60.33	56.464	5.080	1.980	56.871	2.180	50819	108758
RH'-0062	61.98	57.988	5.080	1.980	58.395	2.180	52911	111606
RH'-0064	63.50	59.512	5.080	1.980	59.944	2.180	55047	114499
RH'-0065	65.07	61.011	5.720	2.360	61.443	2.620	56337	117213
RH'-0067	66.68	62.586	5.720	2.360	63.017	2.620	59452	120239
RH'-0068	68.28	64.084	5.720	2.360	64.541	2.620	61722	123087
RH'-0070	69.85	65.634	5.720	2.360	66.091	2.620	64036	143023
RH'-0073	73.03	68.631	5.720	2.360	69.113	2.620	69643	149520
RH'-0076	76.20	71.577	5.720	2.360	72.085	2.620	76451	156017
RH'-0078	77.77	73.101	7.140	2.820	73.609	3.050	78988	159266
RH'-0079	79.38	74.574	7.140	2.820	75.108	3.050	82592	162514
RH'-0080	80.19	75.311	7.140	2.820	75.844	3.050	84372	164116
RH'-0083	82.55	77.572	7.140	2.820	78.130	3.050	88956	169011
RH'-0085	84.99	79.858	7.140	2.820	80.416	3.050	93628	173906
RH'-0088	87.99	82.144	7.140	2.820	82.728	3.050	97322	178757
RH'-0089	88.90	83.642	7.140	2.820	84.226	3.050	101282	217249
RH'-0090	89.99	84.658	7.140	2.820	85.268	3.050	103641	219919
RH'-0092	92.08	86.639	7.920	2.820	87.249	3.050	108313	224992
RH'-0095	95.25	89.586	7.920	2.820	90.221	3.050	116768	232780
RH'-0098	98.43	92.634	7.920	2.820	93.294	3.050	123132	240523



RH'系列

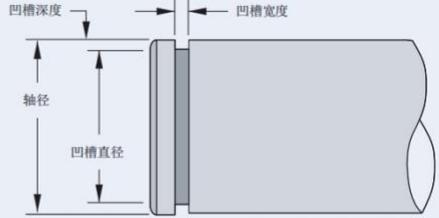
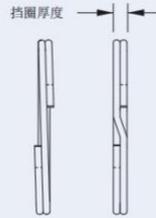
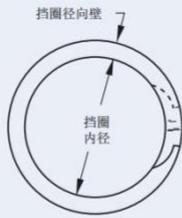
螺旋外挡圈-重负荷 Spiral Outer Retaining Ring



RH' - 0016

系列名称
Overlap Type

轴直径
(mm)



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RH'-0100	100.03	94.183	7.920	2.820	94.844	3.050	126336	244439
RH'-0102	101.60	95.631	7.920	2.820	96.317	3.050	130875	248310
RH'-0108	107.95	102.540	7.920	2.820	103.251	3.050	124333	263796
RH'-0110	109.88	105.689	7.920	2.820	106.426	3.050	127982	271584
RH'-0114	114.30	108.712	7.920	2.820	109.474	3.050	134479	279327
RH'-0121	120.65	114.757	7.920	2.820	115.570	3.050	164339	294857
RH'-0127	127.00	120.802	7.920	2.820	121.666	3.050	165140	310343
RH'-0133	133.35	126.873	8.890	3.230	127.762	3.530	181649	372866
RH'-0140	139.70	132.791	8.890	3.230	133.731	3.530	204166	390621
RH'-0146	146.05	138.836	8.890	3.230	139.827	3.530	222456	408377
RH'-0152	152.40	144.907	8.890	3.230	145.923	3.530	241591	426132
RH'-0159	158.75	150.825	9.650	3.960	152.019	4.420	261482	545214
RH'-0165	165.10	156.997	9.650	3.960	158.115	4.420	282175	567019
RH'-0171	171.45	162.814	9.650	3.960	164.211	4.420	303624	588869
RH'-0178	177.80	168.859	9.650	3.960	170.307	4.420	325874	610674
RH'-0184	184.15	175.031	10.620	4.750	176.327	5.310	351194	632479
RH'-0191	190.50	181.102	10.620	4.750	182.372	5.310	377449	784268
RH'-0197	197.00	187.147	10.620	4.750	188.468	5.310	402236	810434
RH'-0203	203.20	193.192	10.620	4.750	194.564	5.310	427779	836556
RH'-0210	209.55	199.263	11.100	4.750	200.660	5.310	454123	862722
RH'-0216	215.90	205.308	11.100	4.750	206.756	5.310	481268	888843
RH'-0222	222.25	211.430	11.100	4.750	212.928	5.310	506410	915009
RH'-0229	228.60	217.424	11.100	4.750	218.948	5.310	537872	941131
RH'-0235	234.95	223.469	11.100	4.750	225.044	5.310	567375	967297
RH'-0241	241.30	229.514	12.700	4.750	231.140	5.310	597635	993418
RH'-0248	247.65	235.585	12.700	4.750	237.185	5.310	631767	1019584
RH'-0254	254.00	241.503	12.700	4.750	243.205	5.310	669992	1045706

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
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RH'系列

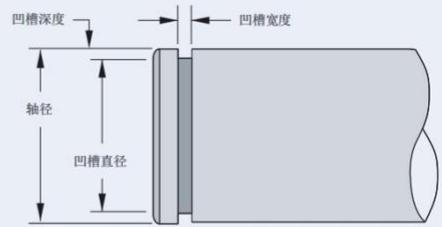
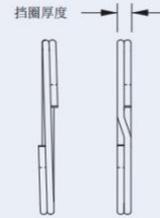
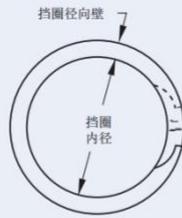
螺旋外挡圈-重负荷 Spiral Outer Retaining Ring



RH' - 0016

系列名称
Overlap Type

轴直径
(mm)



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RH'-0260	260.35	247.523	12.700	4.750	249.276	5.310	702878	1071872
RH'-0267	266.70	253.594	12.700	4.750	255.372	5.310	736520	1097993
RH'-0273	273.05	259.613	12.700	4.750	261.442	5.310	774345	1124159
RH'-0279	279.40	265.659	12.700	4.750	267.538	5.310	809678	1150281
RH'-0286	286.00	271.577	12.700	4.750	273.609	5.310	845767	1176402
RH'-0292	292.10	277.724	14.270	4.750	279.679	5.310	886262	1202568
RH'-0298	298.45	283.743	14.270	4.750	285.750	5.310	923998	1228734
RH'-0305	304.80	289.814	14.270	4.750	291.846	5.310	962535	1254856
RH'-0311	311.15	295.834	14.270	4.750	297.917	5.310	1005700	1280977
RH'-0318	317.50	301.879	14.270	4.750	304.013	5.310	1045884	1307143
RH'-0324	323.85	307.950	14.270	4.750	310.083	5.310	1086868	1333265
RH'-0330	330.20	313.969	16.810	4.750	316.179	5.310	1128609	1359431
RH'-0337	336.55	319.989	16.810	4.750	322.250	5.310	1175334	1385552
RH'-0343	342.90	326.060	16.810	4.750	328.346	5.310	1218722	1411718
RH'-0349	349.25	332.080	16.810	4.750	334.416	5.310	1262910	1437840
RH'-0356	355.60	338.099	16.810	4.750	340.487	5.310	1312305	1464006
RH'-0362	361.95	344.119	16.810	4.750	346.558	5.310	1358140	1490127
RH'-0368	368.30	350.190	19.050	4.750	352.654	5.310	1404776	1516293
RH'-0375	374.65	356.210	19.050	4.750	358.724	5.310	1456841	1542415
RH'-0381	381.00	362.255	19.050	4.750	364.820	5.310	1505124	1568581

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
您想要的各材料, 各规格挡圈, 我们都可为您定做, 详细请咨询客户顾问

What is **波型** A RETAINING RING?

波形挡圈是具有轴向波形的双层弹性挡圈。这些挡圈的功能类似于传统的挡圈（提供可拆卸的轴肩），但在安装后可提供弹力，向凹槽壁和装配组件施加压力。此弹力可补偿公差叠加或游隙。

The corrugated retaining ring is a double-layer elastic retaining ring with axial waveform. The function of these retaining rings is similar to that of conventional retaining rings (providing removable shoulders), but after installation, they can provide elastic force to apply pressure to the groove wall and assembly components. This spring force compensates for tolerance superposition or play.



RW'系列

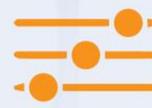
波形外挡圈 Corrugated Outer Retaining Ring



没有凸耳



提供弹力



自由定制



RW'系列

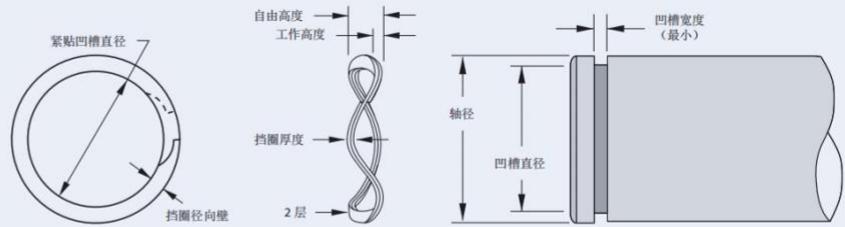
波形外挡圈 Corrugated Outer Retaining Ring



RW' - 0016

系列名称
Overlap Type

轴直径
(mm)



编号 Mascot	轴直径 Shaft diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	波数 Wave Number
	mm	mm	mm	mm	mm	
RW'-0019	19.05	1.067	1.651	17.882	3.048	3
RW'-0022	22.23	1.067	1.905	20.853	3.454	3
RW'-0025	25.40	1.067	2.159	23.876	3.404	3
RW'-0029	28.58	1.270	3.251	26.899	3.607	3
RW'-0032	31.75	1.270	3.251	29.870	3.810	3
RW'-0035	34.93	1.270	3.251	32.791	3.429	4
RW'-0038	38.10	1.270	3.251	35.712	3.327	4
RW'-0041	41.28	1.575	4.013	38.837	3.632	4
RW'-0044	44.45	1.575	4.013	41.910	3.607	4
RW'-0048	47.63	1.575	4.013	44.933	3.683	4
RW'-0051	50.80	1.575	4.013	47.904	3.810	4
RW'-0054	53.98	1.981	4.775	50.876	4.445	4
RW'-0057	57.15	1.981	4.775	53.848	4.572	4
RW'-0060	60.33	1.981	4.775	56.871	4.572	4
RW'-0064	63.50	1.981	4.775	59.944	4.470	4
RW'-0067	66.68	1.981	4.775	63.017	4.826	4
RW'-0070	69.85	2.362	5.715	66.091	5.639	4
RW'-0073	73.03	2.362	5.715	69.113	5.639	4
RW'-0076	76.20	2.362	5.715	72.085	5.842	4
RW'-0079	79.38	2.362	5.715	75.108	5.969	4
RW'-0083	82.55	2.362	5.715	78.130	5.842	4
RW'-0089	88.90	2.819	7.137	84.226	6.350	4
RW'-0092	92.08	2.819	7.137	87.249	6.477	4

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
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RW'系列

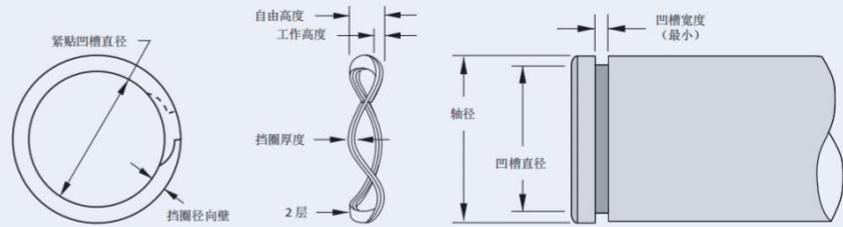
波形外挡圈 Corrugated Outer Retaining Ring



RW' - 0016

系列名称
Overlap Type

轴直径
(mm)



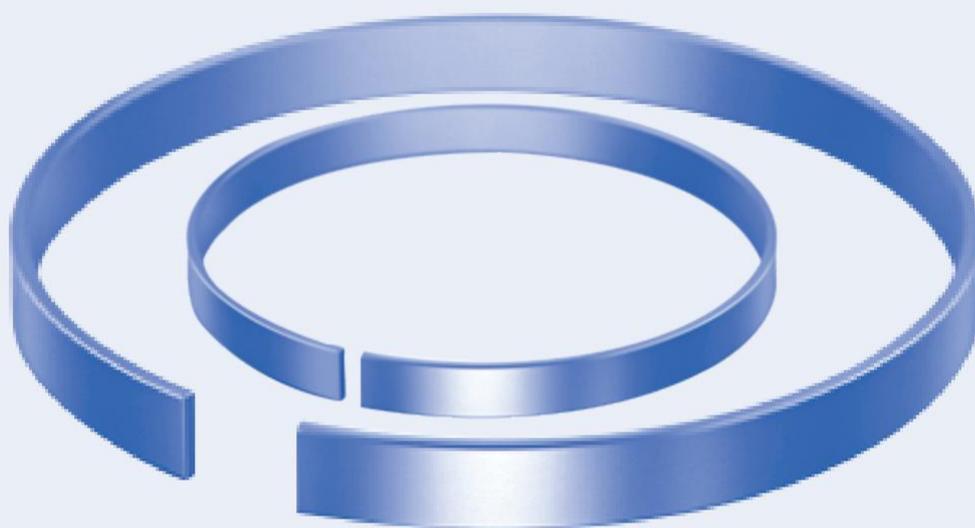
编号 Mascot	轴直径 Shaft diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	波数 Wave Number
	mm	mm	mm	mm	mm	
RW'-0095	95.25	2.819	7.137	90.221	6.680	4
RW'-0098	98.43	2.819	7.137	93.294	6.604	4
RW'-0102	101.60	2.819	7.137	96.317	6.934	4
RW'-0105	104.78	2.819	7.137	99.543	6.807	4
RW'-0108	107.95	2.819	7.137	103.251	6.426	5
RW'-0114	114.30	2.819	7.137	109.474	6.629	5
RW'-0121	120.65	2.819	7.137	115.570	6.553	5
RW'-0127	127.00	2.819	7.137	121.666	6.706	5

PS:基于45,000psi的凹槽材料屈服强度和安全系数，直角边缘线材
您想要的各材料，各规格挡圈，我们都可为您定做，详细请咨询客户顾问



RF'系列

扁线外挡圈 Flat Wire Outer Retaining Ring



没有凸耳



特殊适用



自由定制



RF'系列

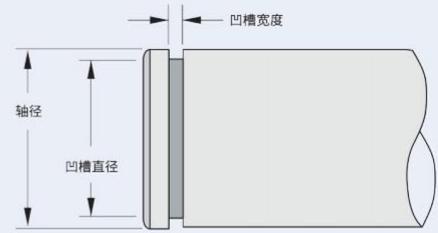
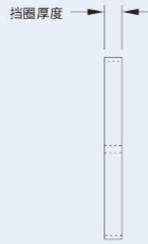
扁线外挡圈 Flat Wire Outer Retaining Ring



RF' - 0016

系列名称
Overlap Type

轴直径
(mm)



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner Diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength
	mm	mm	mm	mm	mm	mm	N
RF'-0010	10.00	9.37	0.43	1.14	9.57	1.27	1051
RF'-0011	11.00	10.35	0.43	1.14	10.57	1.27	1156
RF'-0012	12.00	11.33	0.43	1.14	11.57	1.27	1262
RF'-0013	13.00	12.21	0.53	1.65	12.47	1.78	1688
RF'-0014	14.00	13.19	0.53	1.65	13.47	1.78	1818
RF'-0015	15.00	14.17	0.53	1.65	14.47	1.78	1948
RF'-0016	16.00	15.15	0.53	1.65	15.47	1.78	2078
RF'-0017	17.00	16.13	0.53	1.65	16.47	1.78	2208
RF'-0018	18.00	17.03	0.61	2.24	17.39	2.36	2672
RF'-0019	19.00	18.01	0.61	2.24	18.39	2.36	2820
RF'-0020	20.00	18.99	0.61	2.24	19.39	2.36	2968
RF'-0021	21.00	19.97	0.61	2.24	20.39	2.36	3117
RF'-0022	22.00	20.95	0.61	2.24	21.39	2.36	3265
RF'-0023	23.00	21.93	0.61	2.24	22.39	2.36	3414
RF'-0024	24.00	22.91	0.61	2.24	23.39	2.36	3562
RF'-0025	25.00	23.89	0.61	2.24	24.39	2.36	3711
RF'-0026	26.00	24.72	0.76	3.00	25.24	3.12	4824
RF'-0027	27.00	25.70	0.76	3.00	26.24	3.12	5009
RF'-0028	28.00	26.68	0.76	3.00	27.24	3.12	5195
RF'-0029	29.00	27.66	0.76	3.00	28.24	3.12	5380
RF'-0030	30.00	28.64	0.76	3.00	29.24	3.12	5566
RF'-0031	31.00	29.62	0.76	3.00	30.24	3.12	5751
RF'-0032	32.00	30.60	0.76	3.00	31.24	3.12	5937
RF'-0033	33.00	31.48	0.86	3.81	32.14	3.94	6939
RF'-0034	34.00	32.46	0.86	3.81	33.14	3.94	7149
RF'-0035	35.00	33.44	0.86	3.81	34.14	3.94	7359
RF'-0036	36.00	34.42	0.86	3.81	35.14	3.94	7569



RF'系列

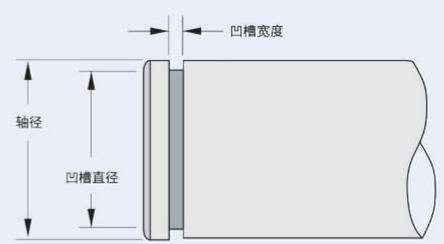
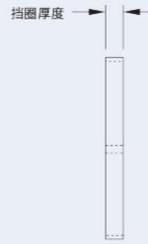
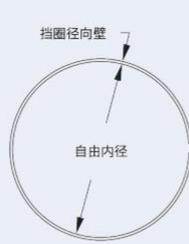
扁线外挡圈 Flat Wire Outer Retaining Ring



RF' - 0016

系列名称
Overlap Type

轴直径
(mm)



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner Diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength
	mm	mm	mm	mm	mm	mm	N
RF'-0037	37.00	35.40	0.86	3.81	36.14	3.94	7780
RF'-0038	38.00	36.38	0.86	3.81	37.14	3.94	7990
RF'-0040	40.00	38.34	0.86	3.81	39.14	3.94	8411
RF'-0041	41.00	39.32	0.86	3.81	40.14	3.94	8621
RF'-0042	42.00	40.30	0.86	3.81	41.14	3.94	8831
RF'-0045	45.00	43.13	0.97	4.75	44.03	4.88	10575
RF'-0047	47.00	45.09	0.97	4.75	46.03	4.88	11045
RF'-0048	48.00	46.07	0.97	4.75	47.03	4.88	11280
RF'-0050	50.00	48.03	0.97	4.75	49.03	4.88	11750
RF'-0051	51.00	49.01	0.97	4.75	50.03	4.88	11985
RF'-0052	52.00	49.99	0.97	4.75	51.03	4.88	12220
RF'-0055	55.00	52.93	0.97	4.75	54.03	4.90	12925
RF'-0056	56.00	53.91	0.97	4.75	55.03	4.90	13160
RF'-0057	57.00	54.89	0.97	4.75	56.03	4.90	13395
RF'-0058	58.00	55.87	0.97	4.75	57.03	4.90	13630
RF'-0060	60.00	57.83	0.97	4.75	59.03	4.90	14100
RF'-0062	62.00	59.62	1.14	5.72	60.86	5.87	17254
RF'-0063	63.00	60.60	1.14	5.72	61.86	5.87	17532
RF'-0064	64.00	61.58	1.14	5.72	62.86	5.87	17811
RF'-0065	65.00	62.56	1.14	5.72	63.86	5.87	18089
RF'-0067	67.00	64.52	1.14	5.72	65.86	5.87	18645
RF'-0068	68.00	65.50	1.14	5.72	66.86	5.87	18924
RF'-0070	70.00	67.46	1.14	5.72	68.86	5.87	19480
RF'-0072	72.00	69.42	1.14	6.72	70.86	6.87	20037
RF'-0075	75.00	72.36	1.14	7.72	72.86	7.87	20872
RF'-0076	76.00	73.34	1.14	8.72	73.86	8.87	21150

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
您想要的各材料, 各规格挡圈, 我们都可为您定做, 详情请咨询客户顾问

What is 等截面 A RETAINING RING?

等截面弹性挡圈是具有间隙的单层直角边缘挡圈。配有拆卸装置，可根据具体的内部或外部应用情况加以利用。这些弹性挡圈为重负荷挡圈，能够承受非常高的力和轴向负荷。

The constant section circlip is a single-layer right angle edge circlip with clearance. Equipped with disassembly device, which can be used according to specific internal or external applications. These circlips are heavy-duty circlips and can withstand very high forces and axial loads.



RC'系列

等截面外挡圈 Equal Section Outer Retaining Ring



没有凸耳



重负荷



自由定制



RC'-A系列

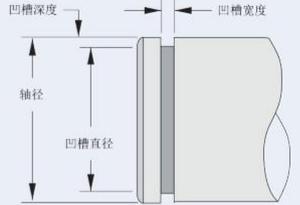
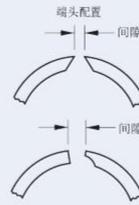
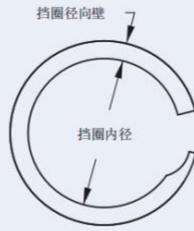
等截面外挡圈-A端 Equal Section Outer Retaining Ring



RC'
系列名称
Overlap Type

0016
孔直径
(mm)

A
端口



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RC'0013-A	13.00	12.27	1.40	0.94	12.40	1.10	1931	10591
RC'0014-A	14.00	13.31	1.40	0.94	13.40	1.10	2077	11396
RC'0015-A	15.00	14.15	1.40	0.94	14.30	1.10	2602	12224
RC'0016-A	16.00	14.98	1.65	0.94	15.20	1.10	3172	13029
RC'0017-A	17.00	16.06	1.65	0.94	16.20	1.10	3367	13838
RC'0018-A	18.00	16.82	1.90	0.94	17.00	1.10	4457	17953
RC'0019-A	19.00	17.81	1.90	0.94	18.00	1.10	4702	18941
RC'0020-A	20.00	18.80	1.90	0.94	19.00	1.10	4951	19928
RC'0021-A	21.00	19.79	1.90	0.94	20.00	1.10	5200	20942
RC'0022-A	22.00	20.83	1.90	0.94	21.00	1.10	5445	21930
RC'0023-A	23.00	21.77	1.90	0.94	22.00	1.10	5698	22939
RC'0024-A	24.00	22.50	2.15	1.15	22.90	1.30	6539	23927
RC'0025-A	25.00	23.70	2.15	1.15	23.90	1.30	6806	24914
RC'0026-A	26.00	24.64	2.15	1.15	24.90	1.30	7082	25929
RC'0027-A	27.00	25.50	2.38	1.15	25.90	1.30	7353	26916
RC'0028-A	28.00	26.32	2.38	1.15	26.60	1.30	9702	33179
RC'0029-A	29.00	27.15	2.38	1.15	27.60	1.30	10053	34385
RC'0030-A	30.00	28.35	2.38	1.15	28.60	1.30	10395	35559
RC'0032-A	32.00	29.87	2.38	1.15	30.30	1.30	13073	37939
RC'0033-A	33.00	31.07	2.38	1.15	31.30	1.30	13478	39113
RC'0034-A	34.00	31.96	3.25	1.44	32.30	1.60	13892	40319

PS:基于45,000psi的凹槽材料屈服强度和安全系数，直角边缘线材
您想要的各材料，各规格挡圈，我们都可为您定做，详细请咨询客户顾问

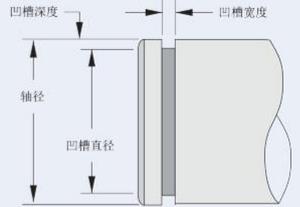
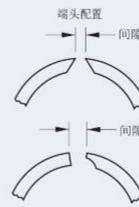
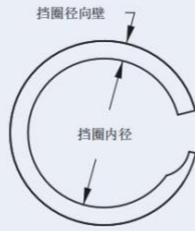


RC'-A系列

等截面外挡圈-A端 Equal Section Outer Retaining Ring

RC' **0016** - **A**

系列名称 孔直径 端口
Overlap Type (mm)



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RC'0035-A	35.00	32.57	3.25	1.44	33.00	1.60	16899	41493
RC'0036-A	36.00	33.64	3.25	1.44	34.00	1.60	17375	50038
RC'0038-A	38.00	35.62	3.25	1.44	36.00	1.60	18344	52827
RC'0040-A	40.00	37.02	4.01	1.69	37.50	1.85	24265	55621
RC'0042-A	42.00	39.08	4.01	1.69	39.50	1.85	25484	58410
RC'0045-A	45.00	42.05	4.01	1.69	42.50	1.85	27303	62578
RC'0047-A	47.00	44.03	4.01	1.69	44.50	1.85	28504	65331
RC'0048-A	48.00	44.89	4.01	1.69	45.50	1.85	29118	66741
RC'0050-A	50.00	46.50	5.08	1.93	47.00	2.15	36529	75282
RC'0052-A	52.00	48.48	5.08	1.93	49.00	2.15	37974	78266
RC'0055-A	55.00	51.45	5.08	1.93	52.00	2.15	40163	82777
RC'0056-A	56.00	52.44	5.08	1.93	53.00	2.15	40906	84307
RC'0058-A	58.00	54.42	5.08	1.93	55.00	2.15	42352	87287
RC'0060-A	60.00	56.55	5.08	1.93	57.00	2.15	43819	90308
RC'0062-A	62.00	58.32	5.08	1.93	59.00	2.15	45283	93328
RC'0063-A	63.00	59.37	5.08	1.93	60.00	2.15	46008	94823
RC'0065-A	65.00	61.35	5.08	2.41	62.00	2.65	47471	116641
RC'0067-A	67.00	63.35	5.08	2.41	64.00	2.65	48939	120240
RC'0068-A	68.00	64.45	5.08	2.41	65.00	2.65	49660	122019
RC'0070-A	70.00	66.22	5.08	2.41	67.00	2.65	51128	125618
RC'0072-A	72.00	68.28	5.08	2.41	69.00	2.65	52591	129221
RC'0075-A	75.00	71.25	5.08	2.41	72.00	2.65	54780	134599
RC'0076-A	76.00	73.23	5.08	2.41	74.00	2.65	56230	138153
RC'0078-A	78.00	74.06	5.08	2.41	75.00	2.65	56968	139977
RC'0080-A	80.00	75.70	6.02	2.41	76.50	2.65	68342	143575
RC'0082-A	82.00	77.68	6.02	2.41	78.50	2.65	70033	147134

PS:基于45,000psi的凹槽材料屈服强度和安全系数，直角边缘线材
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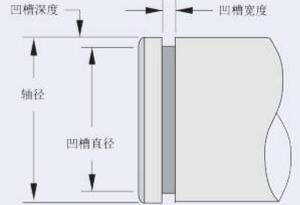
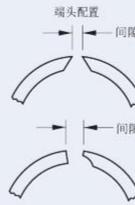
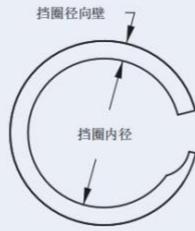
RC'-A系列

等截面外挡圈-A端 Equal Section Outer Retaining Ring



RC' **0016** - **A**

系列名称 孔直径 端口
Overlap Type (mm)



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RC'0085-A	85.00	80.65	6.30	2.91	81.50	3.15	72595	175656
RC'0088-A	88.00	83.60	6.30	2.91	84.50	3.15	75175	181906
RC'0090-A	90.00	85.80	6.30	2.91	86.50	3.15	76865	185998
RC'0095-A	95.00	90.68	6.30	2.91	91.50	3.15	81140	196340
RC'0098-A	98.00	93.70	6.30	2.91	94.50	3.15	83702	202536
RC'0100-A	100.00	95.50	6.30	2.91	96.50	3.15	85415	206682
RC'0102-A	102.00	97.23	6.73	3.89	98.50	4.15	87127	210828
RC'0105-A	105.00	99.83	6.73	3.89	101.00	4.15	102687	276951
RC'0108-A	108.00	102.87	6.73	3.89	104.00	4.15	105619	284855
RC'0110-A	110.00	104.90	6.73	3.89	106.00	4.15	107580	290149
RC'0115-A	115.00	109.85	6.73	3.89	111.00	4.15	112473	303346
RC'0120-A	120.00	115.06	6.73	3.89	116.00	4.15	117344	316478
RC'0125-A	125.00	119.75	6.73	3.89	121.00	4.15	122237	329676
RC'0130-A	130.00	124.70	6.73	3.89	126.00	4.15	127130	342873
RC'0135-A	135.00	129.65	6.73	3.89	131.00	4.15	132023	356071
RC'0140-A	140.00	134.42	6.73	3.89	136.00	4.15	136916	369269
RC'0145-A	145.00	139.55	6.73	3.89	141.00	4.15	141809	382467
RC'0150-A	150.00	143.50	8.03	3.89	145.00	4.15	181986	395665
RC'0155-A	155.00	148.45	8.03	3.89	150.00	4.15	188026	408796
RC'0160-A	160.00	153.40	8.03	3.89	155.00	4.15	194094	421994
RC'0165-A	165.00	158.40	8.03	3.89	160.00	4.15	200166	435192
RC'0170-A	170.00	163.30	8.03	3.89	165.00	4.15	206237	448683
RC'0175-A	175.00	168.25	8.03	3.89	170.00	4.15	212305	461890
RC'0180-A	180.00	173.20	8.03	3.89	175.00	4.15	218377	475097

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
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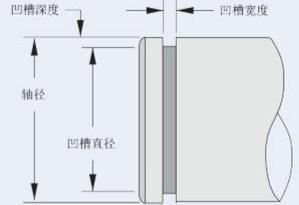
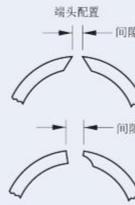
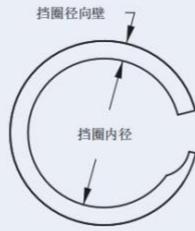


RC'-A系列

等截面外挡圈-A端 Equal Section Outer Retaining Ring

RC' **0016** - **A**

系列名称 孔直径 端口
Overlap Type (mm) □



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RC'0185-A	185.00	177.62	8.03	±0.15	180.00	4.15	224417	488232
RC'0190-A	190.00	183.35	8.03	±0.15	185.00	4.15	230489	501439
RC'0195-A	195.00	188.05	8.03	±0.15	190.00	4.15	236556	514646
RC'0200-A	200.00	193.00	8.03	±0.15	195.00	4.15	242628	527853
RC'0210-A	210.00	201.67	9.48	±0.13	204.00	5.15	306763	657096
RC'0220-A	220.00	211.80	9.48	±0.13	214.00	5.15	321344	688327
RC'0230-A	230.00	221.70	9.48	±0.13	224.00	5.15	335961	719638
RC'0240-A	240.00	231.89	9.48	±0.13	234.00	5.15	350578	750953
RC'0250-A	250.00	241.50	9.48	±0.13	244.00	5.15	365199	782264
RC'0260-A	260.00	249.59	11.05	±0.18	252.00	5.15	505300	813500
RC'0270-A	270.00	259.30	11.05	±0.18	262.00	5.15	524748	844811
RC'0280-A	280.00	268.83	11.05	±0.18	272.00	5.15	544200	876126
RC'0290-A	290.00	279.10	11.05	±0.18	282.00	5.15	563599	907357
RC'0300-A	300.00	289.00	11.05	±0.18	292.00	5.15	583051	938673

PS:基于45,000psi的凹槽材料屈服强度和安全系数，直角边缘线材
您想要的各材料，各规格挡圈，我们都可为您定做，详细请咨询客户顾问



RC'-B系列

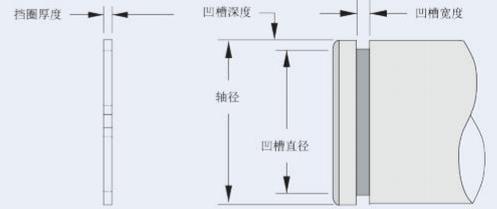
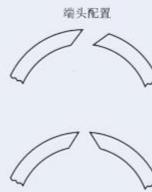
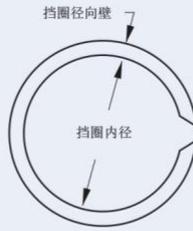
等截面外挡圈-B端 Equal Section Outer Retaining Ring



RC'
系列名称
Overlap Type

0016
孔直径
(mm)

B
端口



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RC'0008-B	7.92	7.137	1.016	0.635	7.366	0.711	1081	7348
RC'0009-B	8.74	6.661	1.016	0.635	6.915	0.711	1413	4793
RC'0009-B	8.99	7.661	1.016	0.635	7.915	0.711	1414	4931
RC'0010-B	9.53	8.661	0.889	0.635	8.915	0.711	1415	5224
RC'0010-B	9.98	9.119	1.016	0.635	9.373	0.711	1482	5478
RC'0010-B	10.31	9.450	1.020	0.640	9.700	0.710	1531	5656
RC'0011-B	11.13	10.211	1.020	0.635	10.465	0.711	1789	6101
RC'0012-B	11.91	11.000	1.020	0.640	11.250	0.710	1918	6533
RC'0013-B	12.70	11.786	1.220	0.889	12.040	0.991	2043	9225
RC'0014-B	14.27	13.310	1.219	0.889	13.564	0.991	2474	10373
RC'0014-B	14.00	13.060	1.220	0.890	13.310	0.990	2341	10168
RC'0014-B	14.27	13.310	1.220	0.890	13.560	0.990	2474	10373
RC'0015-B	15.09	14.100	1.220	0.890	14.380	0.990	2617	10960
RC'0016-B	15.88	14.884	1.570	0.889	15.164	0.991	2755	11534
RC'0017-B	16.99	16.000	1.570	0.890	16.260	0.990	3053	12344
RC'0017-B	17.48	16.358	1.570	0.889	16.662	0.991	3462	15388
RC'0019-B	19.05	17.856	1.570	0.889	18.186	0.991	4009	16777
RC'0020-B	19.84	18.618	1.575	1.067	18.923	1.168	4423	17471
RC'0021-B	20.62	19.406	1.575	1.067	19.710	1.168	4597	18165
RC'0022-B	22.23	20.828	1.575	1.067	21.209	1.168	5505	19571
RC'0024-B	23.83	22.377	1.981	1.067	22.758	1.168	6194	20982
RC'0025-B	25.40	23.901	1.981	1.067	24.282	1.168	6920	22370
RC'0026-B	25.98	24.435	2.362	1.067	24.816	1.168	7400	22882

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
您想要的各材料, 各规格挡圈, 我们都可为您定做, 详细请咨询客户顾问



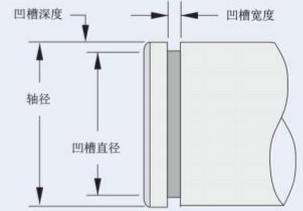
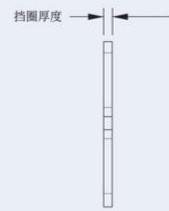
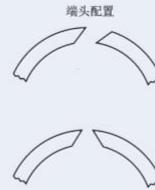
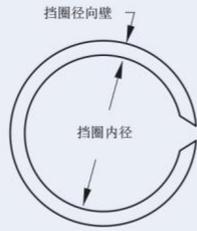
RC'-B系列

等截面外挡圈-B端 Equal Section Outer Retaining Ring

RC' 系列名称
Overlap Type

0016 孔直径
(mm)

B 端口



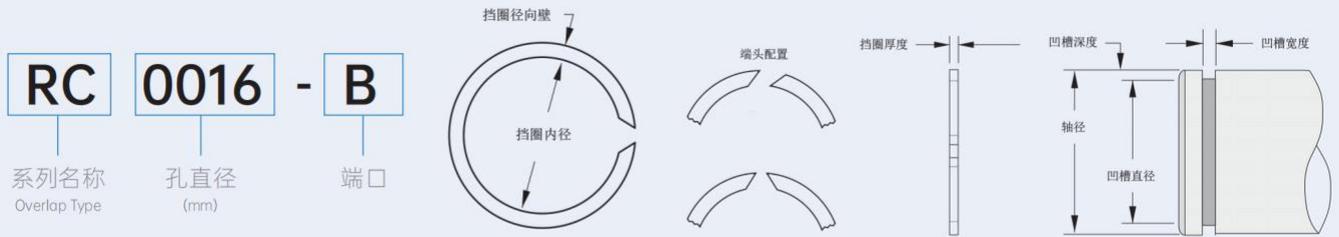
编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RC'0027-B	26.97	25.400	2.362	1.270	25.806	1.422	7685	27910
RC'0029-B	28.58	26.924	2.362	1.270	27.305	1.422	8847	29566
RC'0030-B	30.18	28.473	2.362	1.270	28.854	1.422	9714	31226
RC'0032-B	31.75	29.947	2.769	1.270	30.328	1.422	11009	32854
RC'0033-B	33.32	31.293	2.769	1.270	31.750	1.422	12794	34483
RC'0035-B	34.93	32.791	2.769	1.270	33.249	1.422	14271	36138
RC'0037-B	36.53	34.315	3.175	1.270	34.798	1.422	15379	37794
RC'0038-B	38.10	35.763	3.175	1.270	36.322	1.422	16514	39423
RC'0040-B	39.67	37.262	3.175	1.575	37.846	1.727	17689	48959
RC'0041-B	41.28	38.786	3.581	1.575	39.395	1.727	18913	50935
RC'0043-B	42.88	40.157	3.962	1.575	40.919	1.727	20163	52875
RC'0044-B	44.45	41.656	3.962	1.575	42.418	1.727	22019	54851
RC'0046-B	46.02	43.129	3.962	1.575	43.891	1.727	23937	56795
RC'0048-B	47.63	44.679	3.962	1.575	45.441	1.727	25361	58767
RC'0050-B	50.01	46.965	3.962	1.575	47.727	1.727	27870	61717
RC'0051-B	50.80	47.752	3.962	1.575	48.514	1.727	28311	62687
RC'0052-B	52.37	49.174	3.962	1.981	49.936	2.184	31132	77835
RC'0054-B	53.98	50.724	3.962	1.981	51.486	2.184	32752	80211
RC'0056-B	54.76	51.460	4.343	1.981	52.222	2.184	33909	81382
RC'0057-B	57.15	53.746	4.343	1.981	54.508	2.184	36802	84928
RC'0059-B	58.72	55.220	4.343	1.981	55.982	2.184	39271	87269
RC'0060-B	60.33	56.769	4.343	1.981	57.531	2.184	41087	89645
RC'0062-B	61.90	58.293	4.750	1.981	59.055	2.184	42929	91986

PS:基于45,000psi的凹槽材料屈服强度和安全系数，直角边缘线材
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RC'-B系列

等截面外挡圈-B端 Equal Section Inner Retaining Ring



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RC'0065-B	65.00	61.290	4.750	2.362	62.052	2.616	46685	96592
RC'0067-B	66.68	62.865	4.750	2.362	63.627	2.616	49542	99084
RC'0068-B	68.28	64.389	4.750	2.362	65.151	2.616	51558	101424
RC'0070-B	69.85	65.888	4.750	2.362	66.650	2.616	54495	124564
RC'0073-B	73.03	68.910	4.750	2.362	69.672	2.616	59688	130225
RC'0075-B	74.60	70.383	4.750	2.362	71.145	2.616	62821	133033
RC'0076-B	76.20	71.882	4.750	2.362	72.644	2.616	66056	135885
RC'0078-B	77.77	73.406	5.537	2.769	74.168	3.048	68383	138693
RC'0079-B	79.38	74.955	5.537	2.769	75.717	3.048	70773	141550
RC'0080-B	80.16	75.692	5.537	2.769	76.454	3.048	72468	142952
RC'0083-B	82.55	77.978	5.537	2.769	78.740	3.048	76674	147210
RC'0085-B	84.94	80.264	5.537	2.769	81.026	3.048	80994	151469
RC'0088-B	87.30	82.575	5.537	2.769	83.337	3.048	84328	155679
RC'0089-B	88.90	83.947	6.350	2.769	84.836	3.048	88074	178076
RC'0090-B	89.99	84.988	6.350	2.769	85.877	3.048	90273	180261
RC'0092-B	92.08	86.944	6.350	2.769	87.833	3.048	95212	184435
RC'0094-B	93.65	88.443	6.350	2.769	89.332	3.048	98581	187590
RC'0095-B	95.25	89.941	6.350	2.769	90.830	3.048	102621	190794
RC'0098-B	98.43	92.888	6.350	2.769	93.904	3.048	108482	197153
RC'0100-B	100.03	94.310	6.350	2.769	95.453	3.048	111481	200357
RC'0102-B	101.60	95.783	6.350	2.769	96.926	3.048	115753	203512
RC'0108-B	107.95	102.006	6.350	2.769	103.276	3.048	122989	216234
RC'0111-B	111.13	105.181	6.350	2.769	106.451	3.048	126607	222593
RC'0114-B	114.30	108.077	6.350	2.769	109.474	3.048	134470	228953
RC'0121-B	120.65	114.173	7.137	2.769	115.570	3.048	149413	241671
RC'0127-B	127.00	120.142	7.137	2.769	121.666	3.048	165140	254393

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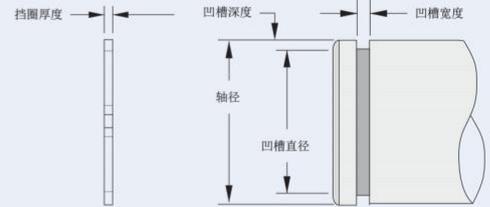
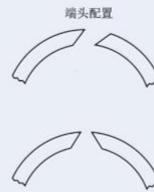
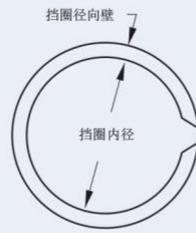


RC'-B系列

等截面外挡圈-B端 Equal Section Inner Retaining Ring

RC **0016** - **B**

系列名称 孔直径 端口
Overlap Type (mm)



编号 Mascot	轴直径 Shaft diameter	挡圈内径 Inner diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RC'0133-B	133.35	126.238	7.925	3.175	127.762	3.531	181653	292507
RC'0140-B	139.70	132.232	7.925	3.175	133.756	3.531	202413	306436
RC'0146-B	146.05	138.328	7.925	3.175	139.852	3.531	220658	320364
RC'0150-B	149.86	142.240	7.925	3.175	143.662	3.531	116416	328722
RC'0152-B	152.40	144.450	7.925	3.175	145.948	3.531	239690	334293
RC'0159-B	158.75	150.266	8.712	3.962	152.044	4.420	259506	418879
RC'0165-B	165.10	156.235	8.712	3.962	158.140	4.420	280110	435633
RC'0171-B	171.45	162.204	8.712	3.962	164.236	4.420	301496	452387
RC'0178-B	177.80	168.173	8.712	3.962	170.332	4.420	323675	469146
RC'0184-B	184.15	173.736	9.525	4.750	176.022	5.309	364882	553269
RC'0191-B	190.50	180.086	9.525	4.750	182.372	5.309	377462	572346
RC'0203-B	203.20	192.024	9.525	4.750	194.564	5.309	427792	610500
RC'0216-B	215.90	204.470	11.100	4.750	207.264	5.309	454527	648659
RC'0229-B	228.60	217.043	12.700	4.750	219.964	5.309	481263	686813
RC'0235-B	234.95	223.520	12.700	4.750	226.314	5.309	494631	705890
RC'0241-B	241.30	229.616	12.700	4.750	232.664	5.309	508003	724972
RC'0254-B	254.00	242.189	12.700	4.750	245.364	5.309	534739	763126

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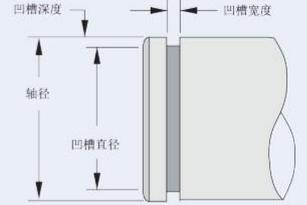
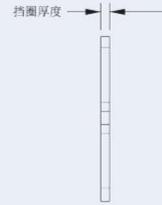
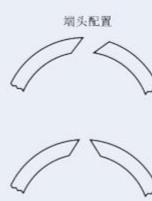
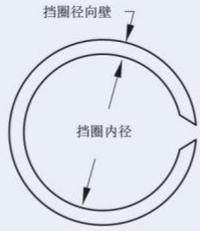
RC'-C系列

等截面外挡圈-C端 Equal Section Inner Retaining Ring



RC **0016** - **C**

系列名称 孔直径 端口
Overlap Type (mm)



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RC'0024-C	12.70	11.811	1.219	0.889	12.040	0.991	2043	9225
RC'0025-C	15.88	14.910	1.575	0.889	15.164	0.991	2755	11534
RC'0026-C	19.05	17.882	1.981	1.067	18.186	1.168	4009	16777
RC'0027-C	22.23	20.904	2.362	1.067	21.158	1.168	5781	19571
RC'0028-C	25.40	23.978	2.388	1.067	24.232	1.168	7236	22370
RC'0029-C	28.58	27.051	2.362	1.067	27.356	1.168	8495	25165
RC'0030-C	30.15	28.448	3.175	1.067	28.829	1.168	9710	26553
RC'0032-C	31.75	29.947	2.362	1.067	30.328	1.168	11009	27959
RC'0035-C	34.93	32.741	2.362	1.067	33.249	1.168	14271	30758
RC'0038-C	38.10	35.814	3.175	1.067	36.322	1.168	16514	33553
RC'0041-C	41.28	38.608	3.175	1.067	39.243	1.168	20448	36348
RC'0044-C	44.45	41.783	3.175	1.067	42.418	1.168	22019	39142
RC'0049-C	49.20	46.533	3.962	1.067	47.168	1.168	24373	43325
RC'0051-C	50.80	48.133	3.962	1.067	48.768	1.168	25165	44736
RC'0056-C	55.55	52.883	3.962	1.067	53.518	1.168	27519	48919
RC'0057-C	57.15	54.483	3.962	1.067	55.118	1.168	28311	50330
RC'0060-C	60.33	57.658	3.962	1.067	58.293	1.168	29882	53124
RC'0064-C	63.50	60.706	3.962	1.067	61.468	1.168	31457	55919
RC'0070-C	69.85	65.938	4.750	1.575	66.700	1.727	53631	94029
RC'0075-C	74.60	70.688	4.750	1.575	71.450	1.727	57276	92057
RC'0077-C	76.20	72.288	4.750	1.575	73.050	1.727	58509	94029
RC'0080-C	79.38	75.311	4.750	1.575	76.200	1.727	61437	97949
RC'0083-C	82.55	78.486	4.750	1.575	79.375	1.727	63893	101865
RC'0089-C	88.90	84.836	4.750	1.575	85.725	1.727	68810	109701
RC'0095-C	95.25	90.678	4.750	1.575	91.694	1.727	82570	141550
RC'0102-C	101.60	97.028	4.750	1.575	98.044	1.727	88074	150984

PS:基于45,000psi的凹槽材料屈服强度和安全系数，直角边缘线材
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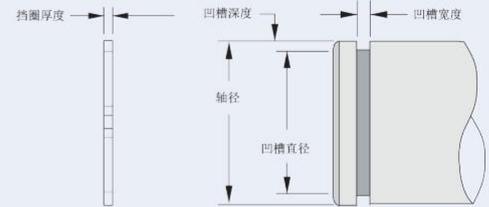
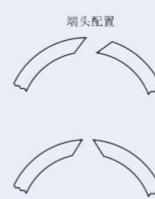
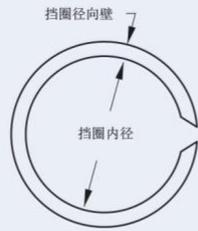
RC'-C系列

等截面外挡圈-C端 Equal Section Inner Retaining Ring



RC **0016** - **C**

系列名称 孔直径 端口
Overlap Type (mm) 端□



编号 Mascot	孔直径 Aperture Diameter	挡圈外径 External Diameter	挡圈径向壁 Radial wall	挡圈厚度 Thickness	凹槽直径 Diameter	凹槽宽度 Width	屈服强度 Yield strength	剪切强度 Shear strength
	mm	mm	mm	mm	mm	mm	N	N
RC'0108-C	107.95	103.378	5.537	1.981	104.394	2.184	93579	160423
RC'0114-C	114.30	109.728	5.537	1.981	110.744	2.184	99084	169857
RC'0121-C	120.65	115.824	5.537	1.981	117.094	2.184	104588	179295
RC'0127-C	127.00	121.920	5.537	1.981	123.444	2.184	110093	188733
RC'0140-C	139.70	134.112	5.537	1.981	135.636	2.184	138404	249124
RC'0152-C	152.40	146.685	6.350	2.362	148.336	2.616	150984	271775
RC'0165-C	165.10	159.258	6.350	2.362	161.036	2.616	163569	294421
RC'0178-C	177.80	171.831	6.350	2.362	173.736	2.616	176149	317067
RC'0191-C	190.50	184.023	6.350	2.362	185.928	2.616	212323	381588
RC'0203-C	203.20	196.596	6.350	2.362	198.628	2.616	226478	407024

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What is 有耳轴用挡圈 A RETAINING RING?

有耳轴用挡圈是一种用于轴类零件轴向定位的机械紧固件，主要作用是防止轴上的零部件（如齿轮、轴承、皮带轮等）在工作过程中发生轴向窜动，从而保证机械结构的稳定运行。

The ear-type shaft retaining ring is a type of mechanical fastener used for axial positioning of shaft parts. Its main function is to prevent axial movement of components on the shaft (such as gears, bearings, pulleys, etc.) during operation, thereby ensuring the stable operation of the mechanical structure.



有凸耳



种类多样

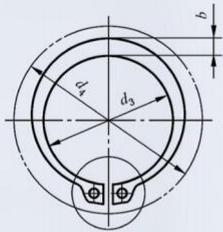


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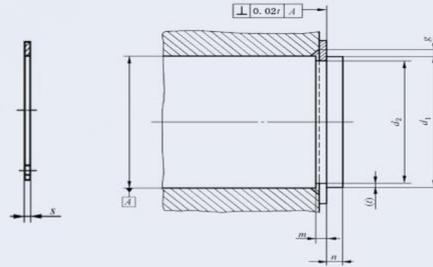
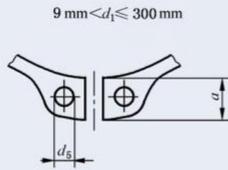


ZC'系列 GB/T 894—2017

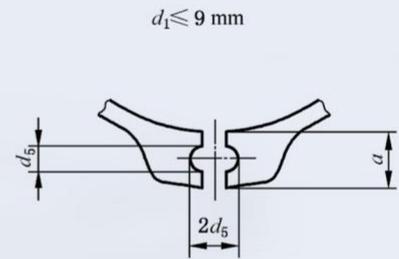
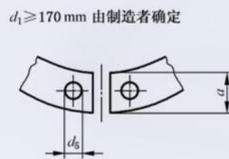
有耳轴用挡圈(冲压型) Retaining Ring With Lugs for Shafts



(A型)

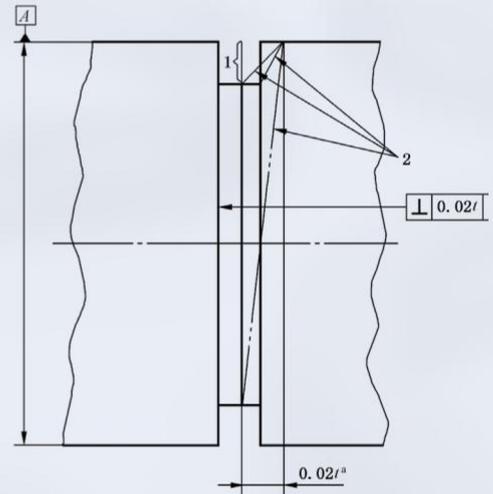


(B型)



代号

- a 支耳径向宽度
Radial width of lug
- b 挡圈开口对面的径向宽度
Radial width opposite the retaining ring opening
- d1 轴径
Shaft diameter
- d2 槽径
Groove diameter
- d3 自由状态挡圈内径
Inner diameter of retaining ring in free state
- d4 外部空间最大中心线直径, 计算公式如下: $d_4 = d_1 - 2.1a$
Maximum centerline diameter of external space, calculated as follows: $d_4 = d_1 - 2.1a$
- d5 安装孔直径
Mounting hole diameter
- F_N 材料下屈服强度 $R_{eL} = 200$ MPa 的沟槽承载能力
Groove load capacity with material lower yield strength $R_{eL} = 200$ MPa
- F_R 直角接触的挡圈承载能力
Load capacity of retaining ring with right-angle contact
- F_{Rg} 倒角接触的挡圈承载能力
Load capacity of retaining ring with chamfer contact
- g 零件倒角尺寸
Part chamfer size
- m 槽宽
Groove width
- n 边距
Margin
- n_{obl} 挡圈极限转速
Limiting speed of retaining ring
- R_{eL} 材料下屈服强度
Material lower yield strength
- s 挡圈厚度
Thickness of retaining ring
- t 当 d_1 和 d_2 为公称尺寸时的槽深
Groove depth when d_1 and d_2 are nominal sizes



说明:

- 1——测量垂直点;
- 2——可能的轮廓线。
- ^a 公差带。



ZC'系列A型 GB/T 894—2017

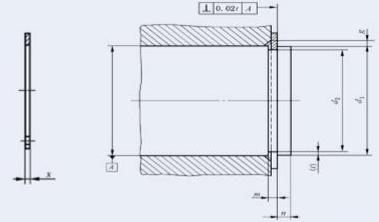
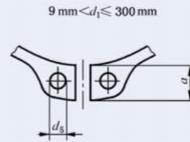
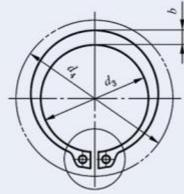
有耳轴用挡圈A型(冲压型) Retaining Ring With Lugs for Shafts



ZC' - 0016

系列名称
Overlap Type

轴直径
(mm)



(A型)

公称规格 d_s	轴用挡圈								沟槽					其他							安装工具规格
	s		d_s		a max	b^* ≈	d_s min	千件质量 ≈ kg	d_s^*		m^* H13	t	n min	d_s	F_N kN	F_R^d kN	g	F_{Rd} kN	n_{dnt} r/min		
	基本尺寸 mm	极限偏差 mm	基本尺寸 mm	极限偏差 mm					基本尺寸 mm	极限偏差 mm											
3	0.40		2.7		1.9	0.8	1.0	0.017	2.8	0	0.5	0.10	0.3	7.0	0.15	0.47	0.5	0.27	360 000		
4	0.40		3.7	+0.04 -0.15	2.2	0.9	1.0	0.022	3.8		0.5	0.10	0.3	8.6	0.20	0.50	0.5	0.30	211 000		
5	0.60	0 -0.05	4.7		2.5	1.1	1.0	0.066	4.8	0 -0.05	0.7	0.10	0.3	10.3	0.26	1.00	0.5	0.80	154 000	1.0	
6	0.70		5.6		2.7	1.3	1.2	0.084	5.7		0.8	0.15	0.5	11.7	0.46	1.45	0.5	0.90	114 000		
7	0.80		6.5		3.1	1.4	1.2	0.121	6.7	0 -0.06	0.9	0.15	0.5	13.5	0.54	2.60	0.5	1.40	121 000		
8	0.80		7.4	+0.06 -0.18	3.2	1.5	1.2	0.158	7.6		0.9	0.20	0.6	14.7	0.81	3.00	0.5	2.00	96 000		
9	1.00		8.4		3.3	1.7	1.2	0.300	8.6		1.1	0.20	0.6	16.0	0.92	3.50	0.5	2.40	85 000		
10	1.00		9.3		3.3	1.8	1.5	0.340	9.6		1.1	0.20	0.6	17.0	1.01	4.00	1.0	2.40	84 000		
11	1.00		10.2		3.3	1.8	1.5	0.410	10.5		1.1	0.25	0.8	18.0	1.40	4.50	1.0	2.40	70 000		
12	1.00		11.0		3.3	1.8	1.7	0.500	11.5		1.1	0.25	0.8	19.0	1.53	5.00	1.0	2.40	75 000		
13	1.00	0 -0.06	11.9	+0.10 -0.36	3.4	2.0	1.7	0.530	12.4	0 -0.11	1.1	0.30	0.9	20.2	2.00	5.80	1.0	2.40	66 000	1.5	
14	1.00		12.9		3.5	2.1	1.7	0.640	13.4		1.1	0.30	0.9	21.4	2.15	6.35	1.0	2.40	58 000		
15	1.00		13.8		3.6	2.2	1.7	0.670	14.3		1.1	0.35	1.1	22.6	2.66	6.90	1.0	2.40	50 000		
16	1.00		14.7		3.7	2.2	1.7	0.700	15.2		1.1	0.40	1.2	23.8	3.26	7.40	1.0	2.40	45 000		
17	1.00		15.7		3.8	2.3	1.7	0.820	16.2		1.1	0.40	1.2	25.0	3.46	8.00	1.0	2.40	41 000		
18	1.20		16.5	+0.10 -0.36	3.9	2.4	2.0	1.11	17.0	0 -0.11	1.30	0.50	1.5	26.2	4.58	17.0	1.5	3.75	39 000	1.5	
19	1.20		17.5		3.9	2.5	2.0	1.22	18.0		1.30	0.50	1.5	27.2	4.48	17.0	1.5	3.80	35 000		
20	1.20		18.5		4.0	2.6	2.0	1.30	19.0		1.30	0.50	1.5	28.4	5.06	17.1	1.5	3.85	32 000		
21	1.20		19.5	+0.13 -0.42	4.1	2.7	2.0	1.42	20.0	0 -0.13	1.30	0.50	1.5	29.6	5.36	16.8	1.5	3.75	29 000		
22	1.20		20.5		4.2	2.8	2.0	1.50	21.0		1.30	0.50	1.5	30.8	5.65	16.9	1.5	3.80	27 000		
24	1.20		22.2		4.4	3.0	2.0	1.77	22.9		1.30	0.55	1.7	33.2	6.75	16.1	1.5	3.65	27 000	2.0	
25	1.20		23.2		4.4	3.0	2.0	1.90	23.9		1.30	0.55	1.7	34.2	7.05	16.2	1.5	3.70	25 000		
26	1.20		24.2	+0.21 -0.42	4.5	3.1	2.0	1.96	24.9	0 -0.21	1.30	0.55	1.7	35.5	7.34	16.1	1.5	3.70	24 000		
28	1.50	0 -0.06	25.9		4.7	3.2	2.0	2.92	26.6		1.60	0.70	2.1	37.9	10.00	32.1	1.5	7.50	21 200		
29	1.50		26.9		4.8	3.4	2.0	3.20	27.6		1.60	0.70	2.1	39.1	10.37	31.8	1.5	7.45	20 000		
30	1.50		27.9		5.0	3.5	2.0	3.31	28.6		1.60	0.70	2.1	40.5	10.73	32.1	1.5	7.65	18 900		
32	1.50		29.6		5.2	3.6	2.5	3.54	30.3		1.60	0.85	2.6	43.0	13.85	31.2	2.0	5.55	16 900		
34	1.50		31.5		5.4	3.8	2.5	3.80	32.3		1.60	0.85	2.6	45.4	14.72	31.3	2.0	5.60	16 100		
35	1.50		32.2	+0.25 -0.50	5.6	3.9	2.5	4.00	33.0		1.60	1.00	3.0	46.8	17.80	30.8	2.0	5.55	15 500		
36	1.75		33.2		5.6	4.0	2.5	5.00	34.0	0 -0.25	1.85	1.00	3.0	47.8	18.33	49.4	2.0	9.00	14 500	2.5	

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
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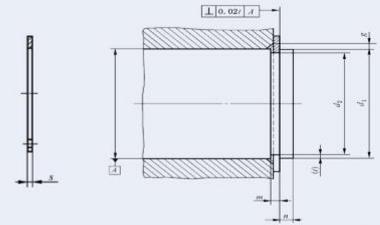
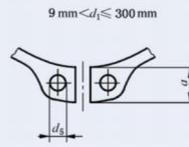
ZC'系列A型 GB/T 894—2017

有耳轴用挡圈A型(冲压型) Retaining Ring With Lugs for Shafts

ZC' - 0016

系列名称
Overlap Type

轴直径
(mm)



(A型)

公称规格 d_s	轴用挡圈								沟槽					其他						安装 工具 规格
	s		d_s		a max	b^* ≈	d_s min	千件 质量 ≈ kg	d_s^b		m^c H13	r	n min	d_s	F_N kN	F_R^d kN	g	F_{Rg}^d kN	$n_{d_{sl}}$ r/min	
	基本 尺寸	极限 偏差	基本 尺寸	极限 偏差					基本 尺寸	极限 偏差										
38	1.75		35.2		5.8	4.2	2.5	5.62	36.0		1.85	1.00	3.0	50.2	19.30	49.5	2.0	9.10	13 600	
40	1.75		36.5	+0.39 -0.90	6.0	4.4	2.5	6.03	37.0		1.85	1.25	3.8	52.6	25.30	51.0	2.0	9.50	14 300	
42	1.75		38.5		6.5	4.5	2.5	6.5	39.5		1.85	1.25	3.8	55.7	26.70	50.0	2.0	9.45	13 000	
45	1.75	0 -0.06	41.5		6.7	4.7	2.5	7.5	42.5		1.85	1.25	3.8	59.1	28.60	49.0	2.0	9.35	11 400	
48	1.75		44.5	+0.39 -0.90	6.9	5.0	2.5	7.9	45.5	0 -0.25	1.85	1.25	3.8	62.5	30.70	49.4	2.0	9.55	10 300	
50	2.00		45.8		6.9	5.1	2.5	10.2	47.0		2.15	1.50	4.5	64.5	38.00	73.3	2.0	14.40	10 500	
52	2.00		47.8		7.0	5.2	2.5	11.1	49.0		2.15	1.50	4.5	66.7	39.70	73.1	2.5	11.50	9 850	
55	2.00		50.8		7.2	5.4	2.5	11.4	52.0		2.15	1.50	4.5	70.2	42.00	71.4	2.5	11.40	8 960	
56	2.00		51.8		7.3	5.5	2.5	11.8	53.0		2.15	1.50	4.5	71.6	42.80	70.8	2.5	11.35	8 670	
58	2.00		53.8		7.3	5.6	2.5	12.6	55.0		2.15	1.50	4.5	73.6	44.30	71.1	2.5	11.50	8 200	3.0
60	2.00	0 -0.07	55.8		7.4	5.8	2.5	12.9	57.0		2.15	1.50	4.5	75.6	46.00	69.2	2.5	11.30	7 620	
62	2.00		57.8	+0.46 -1.10	7.5	6.0	2.5	14.3	59.0	0 -0.30	2.15	1.50	4.5	77.8	47.50	69.3	2.5	11.45	7 240	
63	2.00		58.8		7.6	6.2	2.5	15.9	60.0		2.15	1.50	4.5	79.0	48.30	70.2	2.5	11.60	7 050	
65	2.50		60.8		7.8	6.3	3.0	18.2	62.0		2.65	1.50	4.5	81.4	49.80	135.6	2.5	22.70	6 640	
68	2.50		63.5		8.0	6.5	3.0	21.8	65.0		2.65	1.50	4.5	84.8	52.20	135.9	2.5	23.10	6 910	
70	2.50		65.5		8.1	6.6	3.0	22.0	67.0		2.65	1.50	4.5	87.0	53.80	134.2	2.5	23.00	6 530	
72	2.50		67.5		8.2	6.8	3.0	22.5	69.0		2.65	1.50	4.5	89.2	55.30	131.8	2.5	22.80	6 190	
75	2.50		70.5		8.4	7.0	3.0	24.6	72.0		2.65	1.50	4.5	92.7	57.60	130.0	2.5	22.80	5 740	
78	2.50	0 -0.07	73.5		8.6	7.3	3.0	26.2	75.0	0 -0.30	2.65	1.50	4.5	96.1	60.00	131.3	3.0	19.75	5 450	
80	2.50		74.5	+0.46 -1.10	8.6	7.4	3.0	27.3	76.5		2.65	1.75	5.3	98.1	71.60	128.4	3.0	19.50	6 100	
82	2.50		76.5		8.7	7.6	3.0	31.2	78.5		2.65	1.75	5.3	100.3	73.50	128.0	3.0	19.60	5 860	
85	3.00		79.5		8.7	7.8	3.5	36.4	81.5		3.15	1.75	5.3	103.3	76.20	215.4	3.0	33.40	5 710	3.0
88	3.00		82.5		8.8	8.0	3.5	41.2	84.5		3.15	1.75	5.3	106.5	79.00	221.8	3.0	34.85	5 200	
90	3.00	0 -0.08	84.5		8.8	8.2	3.5	44.5	86.5	0 -0.35	3.15	1.75	5.3	108.5	80.80	217.2	3.0	34.40	4 980	
95	3.00		89.5		9.4	8.6	3.5	49.0	91.5		3.15	1.75	5.3	114.8	85.50	212.2	3.5	29.25	4 550	
100	3.00		94.5		9.6	9.0	3.5	53.7	96.5		3.15	1.75	5.3	120.2	90.00	206.4	3.5	29.00	4 180	
105	4.00		98.0	+0.54 -1.30	9.9	9.3	3.5	80.0	101.0		4.15	2.00	6.0	125.8	107.60	471.8	3.5	67.70	4 740	
110	4.00		103.0		10.1	9.6	3.5	82.0	106.0	0 -0.54	4.15	2.00	6.0	131.2	113.00	457.0	3.5	66.90	4 340	
115	4.00		108.0		10.6	9.8	3.5	84.0	111.0		4.15	2.00	6.0	137.3	118.20	438.6	3.5	65.50	3 970	

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ZC'系列A型 GB/T 894—2017

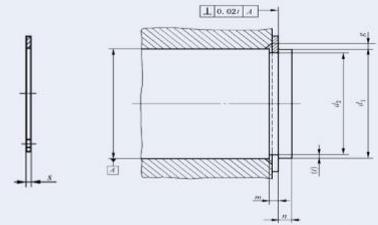
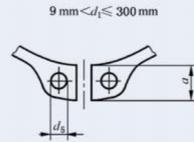
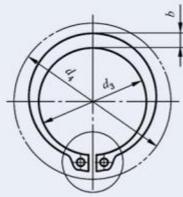


有耳轴用挡圈A型(冲压型) Retaining Ring With Lugs for Shafts

ZC' - 0016

系列名称
Overlap Type

轴直径
(mm)



(A型)

公称规格 d_1	轴用挡圈								沟槽					其他							安装 工具 规格*	
	s		d_2		a max	b^* ≈	d_3 min	千件 质量 ≈ kg	d_4^*		m^* H13	t	n min	d_5	F_N kN	F_R^d kN	g	F_{Rg}^d kN	n_{dht}^d r/min			
	基本 尺寸	极限 偏差	基本 尺寸	极限 偏差					基本 尺寸	极限 偏差												
120	4.00	0 -0.10	113.0		11.0	10.2	3.5	86.0	116.0		4.15	2.00	6.0	143.1	123.50	424.6	3.5	64.50	3 685	4.0		
125	4.00		118.0		11.4	10.4	4.0	90.0	121.0		4.15	2.00	6.0	149.0	128.70	411.5	4.0	56.50	3 420			
130	4.00		123.0	$+0.63$ -1.50	11.6	10.7	4.0	100.0	126.0	0 -0.63	4.15	2.00	6.0	154.4	134.00	395.5	4.0	55.20	3 180			
135	4.00		128.0		11.8	11.0	4.0	104.0	131.0		4.15	2.00	6.0	159.8	139.20	389.5	4.0	55.40	2 950			
140	4.00		133.0		12.0	11.2	4.0	110.0	136.0		4.15	2.0	6.0	165.2	144.5	376.5	4.0	54.4	2 760			
145	4.00		138.0		12.2	11.5	4.0	115.0	141.0		4.15	2.0	6.0	170.6	149.6	367.0	4.0	53.8	2 600			
150	4.00		142.0		13.0	11.8	4.0	120.0	145.0		4.15	2.5	7.5	177.3	193.0	357.5	4.0	53.4	2 480			
155	4.00		146.0		13.0	12.0	4.0	135.0	150.0		4.15	2.5	7.5	182.3	199.6	352.9	4.0	52.6	2 710			
160	4.00		151.0	$+0.63$ -1.50	13.3	12.2	4.0	150.0	155.0	0 -0.63	4.15	2.5	7.5	188.0	206.1	349.2	4.0	52.2	2 540			
165	4.00		155.5		13.5	12.5	4.0	160.0	160.0		4.15	2.5	7.5	193.4	212.5	345.3	5.0	41.4	2 520			
170	4.00	0 -0.10	160.5		13.5	12.9	4.0	170.0	165.0		4.15	2.5	7.5	198.4	219.1	349.2	5.0	41.9	2 440		4.0	
175	4.00		165.5		13.5	13.5	4.0	180.0	170.0		4.15	2.5	7.5	203.4	225.5	340.1	5.0	40.7	2 300			
180	4.00		170.5		14.2	13.5	4.0	190.0	175.0		4.15	2.5	7.5	210.0	232.2	345.3	5.0	41.4	2 180			
185	4.00		175.5		14.2	14.0	4.0	200.0	180.0		4.15	2.5	7.5	215.0	238.6	336.7	5.0	40.4	2 070			
190	4.00		180.5		14.2	14.0	4.0	210.0	185.0		4.15	2.5	7.5	220.0	245.1	333.8	5.0	40.0	1 970			
195	4.00		185.5		14.2	14.0	4.0	220.0	190.0		4.15	2.5	7.5	225.0	251.8	325.4	5.0	39.0	1 835			
200	4.00		190.5		14.2	14.0	4.0	230.0	195.0		4.15	2.5	7.5	230.0	258.3	319.2	5.0	38.3	1 770			
210	5.00		198.0	$+0.72$ -1.70	14.2	14.0	4.0	248.0	204.0	0 -0.72	5.15	3.0	9.0	240.0	325.1	598.2	6.0	59.9	1 835			
220	5.00	0 -0.12	208.0		14.2	14.0	4.0	265.0	214.0		5.15	3.0	9.0	250.0	340.8	572.4	6.0	57.3	1 620	1		
230	5.00		218.0		14.2	14.0	4.0	290.0	224.0		5.15	3.0	9.0	260.0	356.6	548.9	6.0	55.0	1 445			
240	5.00		228.0		14.2	14.0	4.0	310.0	234.0		5.15	3.0	9.0	270.0	372.6	530.3	6.0	53.0	1 305			
250	5.00		238.0	$+0.72$ -1.70	14.2	14.0	4.0	335.0	244.0	0 -0.72	5.15	3.0	9.0	280	388.3	504.3	6.0	50.5	1 180			
260	5.00		245.0		16.2	16.0	5.0	355.0	252.0		5.15	4.0	12.0	294	535.8	540.6	6.0	54.6	1 320			
270	5.00	0 -0.12	255.0		16.2	16.0	5.0	375.0	262.0		5.15	4.0	12.0	304	556.6	525.3	6.0	52.5	1 215			1
280	5.00		265.0	$+0.81$ -2.00	16.2	16.0	5.0	398.0	272.0	0 -0.81	5.15	4.0	12.0	314	576.6	508.2	6.0	50.9	1 100			
290	5.00		275.0		16.2	16.0	5.0	418.0	282.0		5.15	4.0	12.0	324	599.1	490.8	6.0	49.2	1 005			
300	5.00		285.0		16.2	16.0	5.0	440.0	292.0		5.15	4.0	12.0	334	619.1	475.0	6.0	47.5	930			

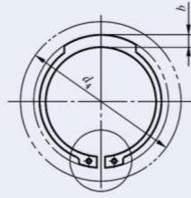
PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
您想要的各材料, 各规格挡圈, 我们都可为您定做, 详细请咨询客户顾问



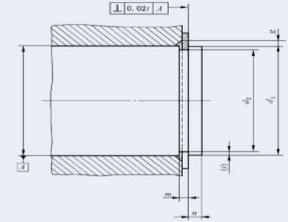
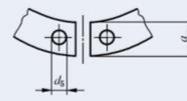
ZC'系列B型 GB/T 894—2017

有耳轴用挡圈B型(冲压型) Retaining Ring With Lugs for Shafts

ZC' - 0016
 系列名称 轴直径



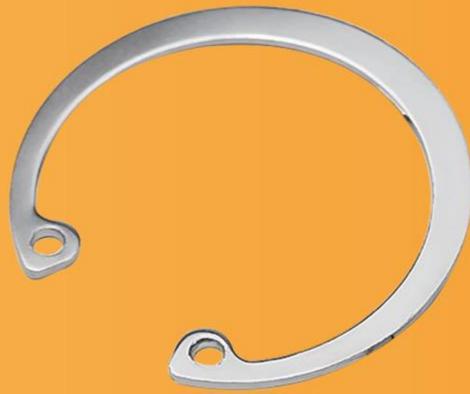
$d_1 \geq 170$ mm 由制造者确定



(B型)

公称规格 d_1	轴用挡圈								沟槽					其他						安装 工具 规格*
	s		d_s		a max	b^* ≈	d_s min	千件 质量 ≈ kg	d_2^*		m^* H13	t	n min	d_1	F_N kN	F_R^d kN	g	F_R^d kN	n^d r/min	
	基本 尺寸	极限 偏差	基本 尺寸	极限 偏差					基本 尺寸	极限 偏差										
15	1.50		13.8		4.8	2.4	2.0	1.10	14.3		1.60	0.35	1.1	25.1	2.66	15.5	1.0	6.40	57 000	
16	1.50		14.7	+0.10 -0.36	5.0	2.5	2.0	1.19	15.2	0	1.60	0.40	1.2	26.5	3.26	16.6	1.0	6.35	44 000	
17	1.50		15.7		5.0	2.6	2.0	1.39	16.2	-0.11	1.60	0.40	1.2	27.5	3.46	18.0	1.0	6.70	46 000	
18	1.50	0 -0.06	16.5		5.1	2.7	2.0	1.56	17.0		1.60	0.50	1.5	28.7	4.58	26.6	1.5	5.85	42 750	
20	1.75		18.5	+0.13 -0.42	5.5	3.0	2.0	2.19	19.0	0	1.85	0.50	1.5	31.6	5.06	36.3	1.5	8.20	36 000	2.0
22	1.75		20.5		6.0	3.1	2.0	2.42	21.0	-0.13	1.85	0.50	1.5	34.6	5.65	36.0	1.5	8.10	29 000	
24	1.75		22.2		6.3	3.2	2.0	2.76	22.9		1.85	0.55	1.7	37.3	6.75	34.2	1.5	7.60	29 000	
25	2.00		23.2		6.4	3.4	2.0	3.59	23.9	0	2.15	0.55	1.7	38.5	7.05	45.0	1.5	10.30	25 000	
28	2.00		25.9	+0.21 -0.42	6.5	3.5	2.0	4.25	26.6	-0.21	2.15	0.70	2.1	41.7	10.00	57.0	1.5	13.40	22 200	
30	2.00		27.9		6.5	4.1	2.0	5.35	28.6		2.15	0.70	2.1	43.7	10.70	57.0	1.5	13.60	21 100	
32	2.00		29.6		6.5	4.1	2.5	5.85	30.3		2.15	0.85	2.6	45.7	13.80	55.5	2.0	10.00	18 400	
34	2.50	0 -0.07	31.5		6.6	4.2	2.5	7.05	32.3		2.65	0.85	2.6	47.9	14.70	87.0	2.0	15.60	17 800	
35	2.50		32.2	+0.25 -0.50	6.7	4.2	2.5	7.20	33.0	0	2.65	1.00	3.0	49.1	17.80	86.0	2.0	15.40	16 500	2.5
38	2.50		35.2		6.8	4.3	2.5	8.30	36.0	-0.25	2.65	1.00	3.0	52.3	19.30	101.0	2.0	18.60	14 500	
40	2.50		36.5	+0.39 -0.90	7.0	4.4	2.5	8.60	37.5		2.65	1.25	3.8	54.7	25.30	104.0	2.0	19.30	14 300	
42	2.50		38.5		7.2	4.5	2.5	9.30	39.5		2.65	1.25	3.8	57.2	26.70	102.0	2.0	19.20	13 000	
45	2.50		41.5		7.5	4.7	2.5	10.7	42.5		2.65	1.25	3.8	60.8	28.6	100.0	2.0	19.1	11 400	
48	2.50	0 -0.07	44.5	+0.39 -0.90	7.8	5.0	2.5	11.3	45.5	0	2.65	1.25	3.8	64.4	30.7	101.0	2.0	19.5	10 300	
50	3.00		45.8		8.0	5.1	2.5	15.3	47.0	-0.25	3.15	1.50	4.5	66.8	38.0	165.0	2.0	32.4	10 500	
52	3.00		47.8		8.2	5.2	2.5	16.6	49.0		3.15	1.50	4.5	69.3	39.7	165.0	2.5	26.0	9 850	2.5
55	3.00	0 -0.08	50.8		8.5	5.4	2.5	17.1	52.0		3.15	1.50	4.5	72.9	42.0	161.0	2.5	25.6	8 960	
58	3.00		53.8		8.8	5.6	2.5	18.9	55.0		3.15	1.50	4.5	76.5	44.3	160.0	2.5	26.0	8 200	
60	3.00		55.8		9.0	5.8	2.5	19.4	57.0		3.15	1.50	4.5	78.9	46.0	156.0	2.5	25.4	7 620	
65	4.00		60.8	+0.16 -1.10	9.3	6.3	3.0	29.1	62.0	0	4.15	1.50	4.5	84.6	49.8	346.0	2.5	58.0	6 640	
70	4.00		65.5		9.5	6.6	3.0	35.3	67.0	-0.30	4.15	1.50	4.5	90.0	53.8	343.0	2.5	59.0	6 530	3.0
75	4.00		70.5		9.7	7.0	3.0	39.3	72.0		4.15	1.50	4.5	95.4	57.6	333.0	2.5	58.0	5 740	
80	4.00	0 -0.10	74.5		9.8	7.4	3.0	43.7	76.5		4.15	1.75	5.3	100.6	71.6	328.0	3.0	50.0	6 100	
85	4.00		79.5		10.0	7.8	3.5	48.5	81.5		4.15	1.75	5.3	106.0	76.2	383.0	3.0	59.4	5 710	
90	4.00		84.5	+0.54 -1.30	10.2	8.2	3.5	59.4	86.5	0	4.15	1.75	5.3	111.5	80.8	386.0	3.0	61.0	4 980	3.5
100	4.0		94.5		10.5	9.0	3.5	71.6	96.5	-0.35	4.15	1.75	5.3	122.1	90.0	368.0	3.0	51.6	4 180	

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
 您想要的各材料, 各规格挡圈, 我们都可为您定做, 详情请咨询客户顾问



What is 有耳孔用挡圈 A RETAINING RING?

有耳孔用挡圈是一种用于孔类零件轴向定位的机械紧固件，主要作用是防止孔内安装的零部件（如轴、衬套、滚动轴承等）在工作过程中发生轴向窜动，从而保障机械结构的稳定运行。

The ear-type hole retaining ring is a mechanical fastener used for axial positioning of hole-type parts. Its main function is to prevent axial movement of components installed in the hole (such as shafts, bushings, rolling bearings, etc.) during operation, thereby ensuring the stable operation of the mechanical structure.



有凸耳



种类多样

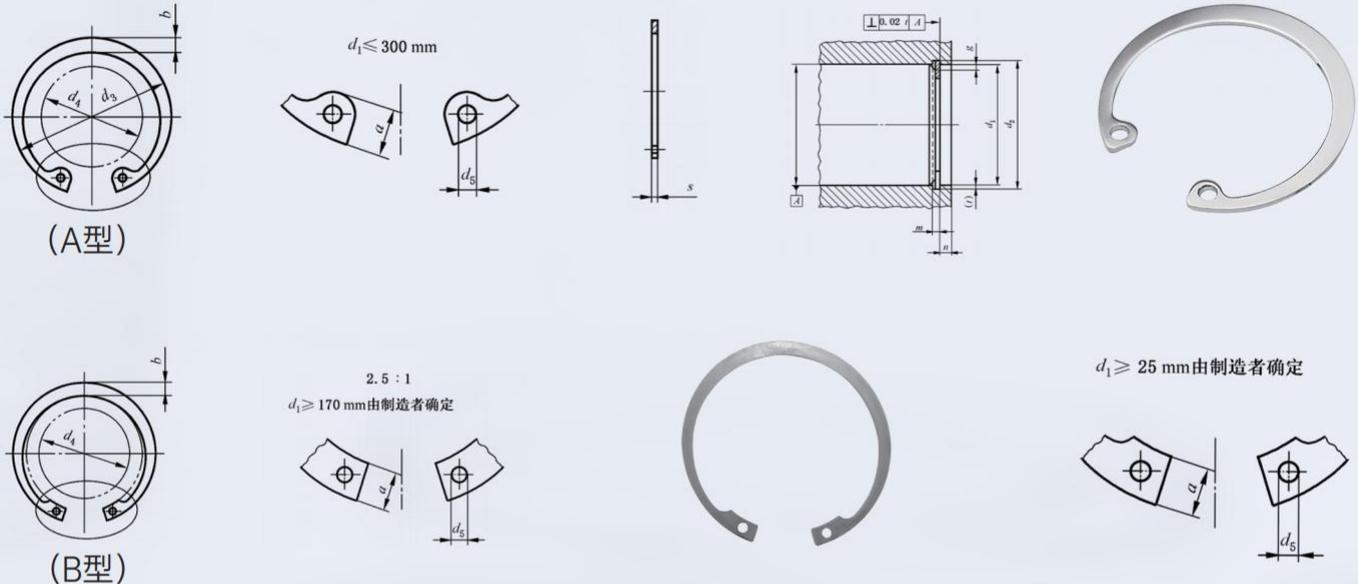


自由定制



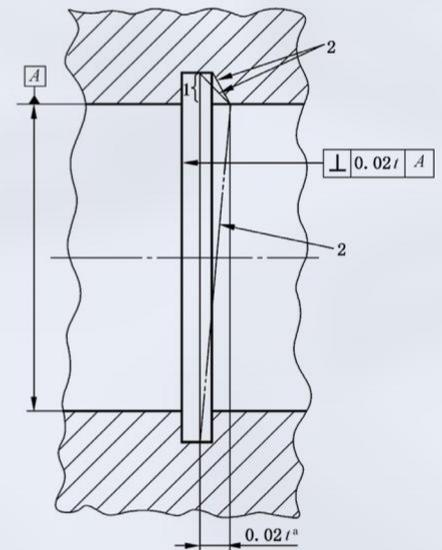
KC'系列 GB/T 893—2017

有耳孔用挡圈(冲压型) Retaining Ring With Lugs for Bores



代号

- a 支耳径向宽度
Radial width of lug
- b 挡圈开口对面的径向宽度
Radial width opposite the retaining ring opening
- d₁ 轴径
Shaft diameter
- d₂ 槽径
Groove diameter
- d₃ 自由状态挡圈内径
Inner diameter of retaining ring in free state
- d₄ 外部空间最大中心线直径,计算公式如下: $d_4 = d_1 - 2 \cdot 1a$
Maximum centerline diameter of external space,calculated as follows: $d_4 = d_1 - 2 \cdot 1a$
- d₅ 安装孔直径
Mounting hole diameter
- F_N 材料下屈服强度 $R_{eL} = 200$ MPa的沟槽承载能力
Groove load capacity with material lower yield strength $R_{eL} = 200$ MPa
- F_R 直角接触的挡圈承载能力
Load capacity of retaining ring with right-angle contact
- F_{Rg} 倒角接触的挡圈承载能力
Load capacity of retaining ring with chamfer contact
- g 零件倒角尺寸
Part chamfer size
- m 槽宽
Groove width
- n 边距
Margin
- R_{eL} 材料下屈服强度
Material lower yield strength
- s 挡圈厚度
Thickness of retaining ring
- t 当d₁和d₂为公称尺寸时的槽深
Groove depth when d₁ and d₂ are nominal sizes



说明:

- 1——测量垂点;
 - 2——可能的轮廓线。
- * 公差带。



KC'系列A型 GB/T 893—2017

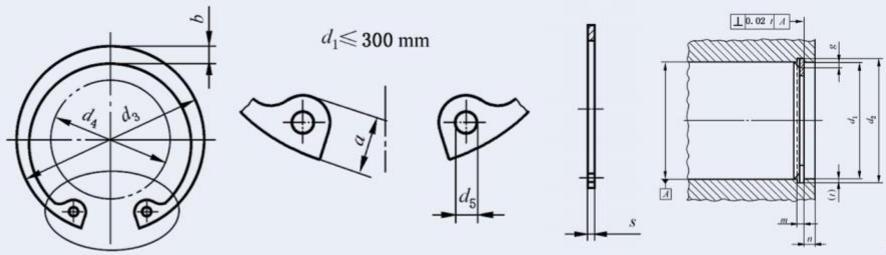


有耳孔用挡圈A型(冲压型) Retaining Ring With Lugs for Bores (A型)

KC' - 0016

系列名称
Overlap Type

轴直径
(mm)



(A型)

公称规格 d_1	孔用挡圈								沟槽					其他					安装工具规格 [*]	
	s		d_3		a max	b^* ≈	d_4 min	千件质量 ≈ kg	d_5^b		m^c H13	t	n min	d_6	F_N kN	F_{NB} kN	F_{NB} kN	g		F_{NB} kN
	基本尺寸	极限偏差	基本尺寸	极限偏差					基本尺寸	极限偏差										
8	0.80	0	8.7		2.4	1.1	1.0	0.14	8.4	+0.09	0.9	0.20	0.6	3.0	0.86	2.00	0.5	1.50	1.0	
9	0.80	-0.05	9.8		2.5	1.3	1.0	0.15	9.4	0	0.9	0.20	0.6	3.7	0.96	2.00	0.5	1.50	1.0	
10	1.00		10.8		3.2	1.4	1.2	0.18	10.4		1.1	0.20	0.6	3.3	1.08	4.00	0.5	2.20		
11	1.00		11.8		3.3	1.5	1.2	0.31	11.4		1.1	0.20	0.6	4.1	1.17	4.00	0.5	2.30		
12	1.00		13	+0.36 -0.10	3.4	1.7	1.5	0.37	12.5		1.1	0.25	0.8	4.9	1.60	4.00	0.5	2.30	1.5	
13	1.00		14.1		3.6	1.8	1.5	0.42	13.6	+0.11	1.1	0.30	0.9	5.4	2.10	4.20	0.5	2.30		
14	1.00		15.1		3.7	1.9	1.7	0.52	14.6	0	1.1	0.30	0.9	6.2	2.25	4.50	0.5	2.30		
15	1.00		16.2		3.7	2.0	1.7	0.56	15.7		1.1	0.35	1.1	7.2	2.80	5.00	0.5	2.30		
16	1.00		17.3		3.8	2.0	1.7	0.60	16.8		1.1	0.40	1.2	8.0	3.40	5.50	1.0	2.60		
17	1.00		18.3		3.9	2.1	1.7	0.65	17.8		1.1	0.40	1.2	8.8	3.60	6.00	1.0	2.50		
18	1.00		19.5		4.1	2.2	2.0	0.74	19		1.1	0.50	1.5	9.4	4.80	6.50	1.0	2.60		
19	1.00		20.5	+0.42 -0.13	4.1	2.2	2.0	0.83	20		1.1	0.50	1.5	10.4	5.10	6.80	1.0	2.50		
20	1.00		21.5		4.2	2.3	2.0	0.90	21	+0.13	1.1	0.50	1.5	11.2	5.40	7.20	1.0	2.50	2.0	
21	1.00	0 -0.06	22.5		4.2	2.4	2.0	1.00	22	0	1.1	0.50	1.5	12.2	5.70	7.60	1.0	2.60		
22	1.00		23.5		4.2	2.5	2.0	1.10	23		1.1	0.50	1.5	13.2	5.90	8.00	1.0	2.70		
24	1.20		25.9		4.4	2.6	2.0	1.42	25.2		1.3	0.60	1.8	14.8	7.70	13.90	1.0	4.60		
25	1.20		26.9	+0.42 -0.21	4.5	2.7	2.0	1.50	26.2	+0.21	1.3	0.60	1.8	15.5	8.00	14.60	1.0	4.70		
26	1.20		27.9		4.7	2.8	2.0	1.60	27.2	0	1.3	0.60	1.8	16.1	8.40	13.85	1.0	4.60		
28	1.20		30.1		4.8	2.9	2.0	1.80	29.4		1.3	0.70	2.1	17.9	10.50	13.30	1.0	4.50		
30	1.20		32.1		4.8	3.0	2.0	2.06	31.4		1.3	0.70	2.1	19.9	11.30	13.70	1.0	4.60		
31	1.20		33.4		5.2	3.2	2.5	2.10	32.7		1.3	0.85	2.6	20.0	14.10	13.80	1.0	4.70		
32	1.20		34.4	+0.50 -0.25	5.4	3.2	2.5	2.21	33.7	+0.25	1.3	0.85	2.6	20.6	14.60	13.80	1.0	4.70		
34	1.50		36.5		5.4	3.3	2.5	3.20	35.7	0	1.60	0.85	2.6	22.6	15.40	26.20	1.5	6.30	2.5	
35	1.50		37.8		5.4	3.4	2.5	3.54	37.0		1.60	1.00	3.0	23.6	18.80	26.90	1.5	6.40		
36	1.50		38.8		5.4	3.5	2.5	3.70	38.0		1.60	1.00	3.0	24.6	19.40	26.40	1.5	6.40		
37	1.50		39.8	+0.50 -0.25	5.5	3.6	2.5	3.74	39		1.60	1.00	3.0	25.4	19.80	27.10	1.5	6.50		
38	1.50		40.8		5.5	3.7	2.5	3.90	40		1.60	1.00	3.0	26.4	22.50	28.20	1.5	6.70	2.5	
40	1.75		43.5		5.8	3.9	2.5	4.70	42.5	+0.25	1.85	1.25	3.8	27.8	27.00	44.60	2.0	8.30		
42	1.75	0 -0.06	45.5	+0.90 -0.39	5.9	4.1	2.5	5.40	44.5	0	1.85	1.25	3.8	29.6	28.40	44.70	2.0	8.40		
45	1.75		48.5		6.2	4.3	2.5	6.00	47.5		1.85	1.25	3.8	32.0	30.20	43.10	2.0	8.20		
47	1.75		50.5		6.4	4.4	2.5	6.10	49.5		1.85	1.25	3.8	33.5	31.40	43.50	2.0	8.30		
48	1.75		51.5		6.4	4.5	2.5	6.70	50.5		1.85	1.25	3.8	34.5	32.00	43.20	2.0	8.40		
50	2.00		54.2		6.5	4.6	2.5	7.30	53.0		2.15	1.50	4.5	36.3	40.50	60.80	2.0	12.10		
52	2.00		56.2		6.7	4.7	2.5	8.20	55.0		2.15	1.50	4.5	37.9	42.00	60.25	2.0	12.00		
55	2.00		59.2		6.8	5.0	2.5	8.30	58.0		2.15	1.50	4.5	40.7	44.40	60.30	2.0	12.50		
56	2.00		60.2		6.8	5.1	2.5	8.70	59.0		2.15	1.50	4.5	41.7	45.20	60.30	2.0	12.60		
58	2.00		62.2		6.9	5.2	2.5	10.50	61.0		2.15	1.50	4.5	43.5	46.70	60.80	2.0	12.70		
60	2.00		64.2	+1.10 -0.46	7.3	5.4	2.5	11.10	63.0	+0.30	2.15	1.50	4.5	44.7	48.30	61.00	2.0	13.00		

PS:基于45,000psi的凹槽材料屈服强度和安全系数,直角边缘线材
您想要的各材料,各规格挡圈,我们都可为您定做,详细请咨询客户顾问



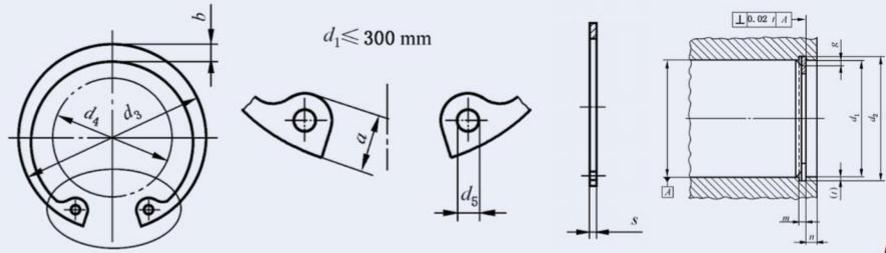
KC'系列A型 GB/T 893—2017

有耳孔用挡圈A型(冲压型) Retaining Ring With Lugs for Bores (A型)

KC' - 0016

系列名称
Overlap Type

轴直径
(mm)



(A型)

公称规格 d_1	孔用挡圈								沟槽					其他					安装工具规格 [*]	
	s		d_2		a max	b^* ≈	d_3 min	千件 质量 ≈ kg	d_4^b		m^c H13	t	n min	d_5	F_N kN	F_R^d kN	F_R^d kN	g		F_R^d kN
	基本 尺寸	极限 偏差	基本 尺寸	极限 偏差					基本 尺寸	极限 偏差										
62	2.00		66.2		7.3	5.5	2.5	11.20	65.0	0	2.15	1.50	4.5	46.7	49.80	60.90	2.0	13.00	3.0	
63	2.00	0	67.2		7.3	5.6	2.5	12.40	66.0		2.15	1.50	4.5	47.7	50.60	60.80	2.0	13.00		
65	2.50	-0.07	69.2		7.6	5.8	3.0	14.30	68.0		2.65	1.50	4.5	49.0	51.80	121.00	2.5	20.80		
68	2.50		72.5		7.8	6.1	3.0	16.00	71.0		2.65	1.50	4.5	51.6	51.50	121.50	2.5	21.20		
70	2.50		74.5		7.8	6.2	3.0	16.50	73.0		2.65	1.50	4.5	53.6	56.20	119.00	2.5	21.00		
72	2.50		76.5		7.8	6.4	3.0	18.10	75.0		2.65	1.50	4.5	55.6	58.00	119.20	2.5	21.00		
75	2.50		79.5		7.8	6.6	3.0	18.80	78.0		2.65	1.50	4.5	58.6	60.00	118.00	2.5	21.00		
78	2.50		82.5		8.5	6.6	3.0	20.4	81.0		2.65	1.50	4.5	60.1	62.30	122.50	2.5	21.80		
80	2.50		85.5		8.5	6.8	3.0	22.0	83.5		2.65	1.75	5.3	62.1	74.60	120.90	2.5	21.80		
82	2.50		87.5	+1.30 -0.54	8.5	7.0	3.0	24.0	85.5	+0.35 0	2.65	1.75	5.3	64.1	76.60	119.00	2.5	21.40		
85	3.00	0	90.5		8.6	7.0	3.5	25.3	88.5		3.15	1.75	5.3	66.9	79.50	201.40	3.0	31.20		
88	3.00	-0.08	93.5		8.6	7.2	3.5	28.0	91.5		3.15	1.75	5.3	69.9	82.10	209.40	3.0	32.70		
90	3.00		95.5		8.6	7.6	3.5	31.0	93.5		3.15	1.75	5.3	71.9	84.00	199.00	3.0	31.40		
92	3.00		97.5		8.7	7.8	3.5	32.0	95.5		3.15	1.75	5.3	73.7	85.80	201.00	3.0	32.00		
95	3.00	0	100.5		8.8	8.1	3.5	35.0	98.5	+0.35 0	3.15	1.75	5.3	76.5	88.60	195.00	3.0	31.40	3.0	
98	3.00	-0.08	103.5		9.0	8.3	3.5	37.0	101.5		3.15	1.75	5.3	79.0	91.30	191.00	3.0	31.00		
100	3.00		105.5	+1.30 -0.54	9.2	8.4	3.5	38.0	103.5		3.15	1.75	5.3	80.6	93.10	188.00	3.0	30.80		
102	4.00		108		9.5	8.5	3.5	55.0	106.0		4.15	2.00	6.0	82.0	108.80	439.00	3.0	72.60		
105	4.00		112		9.5	8.7	3.5	56.0	109.0		4.15	2.00	6.0	85.0	112.00	436.00	3.0	73.00		
108	4.00		115		9.5	8.9	3.5	60.0	112.0	+0.54 0	4.15	2.00	6.0	88.0	115.00	419.00	3.0	71.00		
110	4.00		117		10.4	9.0	3.5	64.5	114.0		4.15	2.00	6.0	88.2	117.00	415.00	3.0	71.00		
112	4.00		119		10.5	9.1	3.5	72.0	116.0		4.15	2.00	6.0	90.0	119.00	418.00	3.0	72.00		
115	4.00		122		10.5	9.3	3.5	74.5	119.0		4.15	2.00	6.0	93.0	122.00	409.00	3.0	71.20		
120	4.00		127		11.0	9.7	3.5	77.0	124.0		4.15	2.00	6.0	96.9	127.00	396.00	3.0	70.00		
125	4.00		132		11.0	10.0	4.0	79.0	129.0		4.15	2.00	6.0	101.9	132.00	385.00	3.0	70.00		
130	4.00		137		11.0	10.2	4.0	82.0	134.0		4.15	2.00	6.0	106.9	138.00	374.00	3.0	69.00		
135	4.00	0	142		11.2	10.5	4.0	84.0	139.0		4.15	2.00	6.0	111.5	143.00	358.00	3.0	67.00	4.0	
140	4.00	-0.10	147	+1.50 -0.63	11.2	10.7	4.0	87.5	144.0		4.15	2.00	6.0	116.5	148.00	350.00	3.0	66.50		
145	4.00		152		11.4	10.9	4.0	93.0	149.0	+0.63 0	4.15	2.00	6.0	121.0	153.00	336.00	3.0	65.00		
150	4.00		158		12.0	11.2	4.0	105.0	155.0		4.15	2.50	7.5	124.8	191.00	326.00	3.0	64.00		
155	4.00		164		12.0	11.4	4.0	107.0	160.0		4.15	2.50	7.5	129.8	206.00	324.00	3.5	55.00		
160	4.00		169		13.0	11.6	4.0	110.0	165.0		4.15	2.50	7.5	132.7	212.00	321.00	3.5	54.40		
165	4.00		174.5		13.0	11.8	4.0	125.0	170.0		4.15	2.50	7.5	137.7	219.00	319.00	3.5	54.00		
170	4.00		179.5		13.5	12.2	4.0	140.0	175.0		4.15	2.50	7.5	141.6	225.00	349.00	3.5	59.00		
175	4.00		184.5		13.5	12.7	4.0	150.0	180.0		4.15	2.50	7.5	146.6	232.00	351.00	3.5	59.00		
180	4.00		189.5	+1.70 -0.72	14.2	13.2	4.0	165.0	185.0	+0.72 0	4.15	2.50	7.5	150.2	238.00	347.00	3.5	58.50		
185	4.00		194.5		14.2	13.7	4.0	170.0	190.0		4.15	2.50	7.5	155.2	245.00	349.00	3.5	57.50		
190	4.00		199.5		14.2	13.8	4.0	175.0	195.0		4.15	2.50	7.5	160.2	251.00	340.00	3.5	57.50		

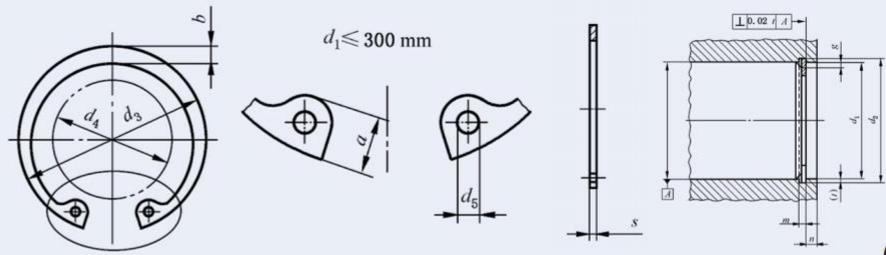
PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
您想要的各材料, 各规格挡圈, 我们都可为您定做, 详细请咨询客户顾问



KC'系列A型 GB/T 893—2017

有耳孔用挡圈A型(冲压型) Retaining Ring With Lugs for Bores

KC' - 0016
 系列名称 Overlap Type
 轴直径 (mm)



(A型)

公称规格 d_1	孔用挡圈								沟槽					其他					
	s		d_3		a max	b^* ≈	d_2 min	千件 质量 ≈ kg	d_2^b		m^* H13	t	n min	d_4	F_N kN	F_{Nk}^d kN	g	F_{Nk}^d kN	安装工具规格 ^c
	基本 尺寸	极限 偏差	基本 尺寸	极限 偏差					基本 尺寸	极限 偏差									
195	4.00	0 -0.10	204.5		14.2	14.0	4.0	183.0	200.0		4.15	2.50	7.5	165.2	258.00	330.00	3.5	55.50	4.0
200	4.00		209.5	$+1.70$ -0.72	14.2	14.0	4.0	195.0	205.0		4.15	2.50	7.5	170.2	265.00	325.00	3.5	55.00	
210	5.00		222.0		14.2	14.0	4.0	270.0	216.0	$+0.72$ 0	5.15	3.00	9.0	180.2	333.00	601.00	4.0	89.50	
220	5.00		232.0		14.2	14.0	4.0	315.0	226.0		5.15	3.00	9.0	190.2	349.00	574.00	4.0	85.00	
230	5.00		242.0		14.2	14.0	4.0	330.0	236.0		5.15	3.00	9.0	200.2	365.00	549.00	4.0	81.00	
240	5.00		252.0		14.2	14.0	4.0	345.0	246.0		4.15	3.00	9.0	210.2	380.00	525.00	4.0	77.50	
250	5.00		262.0		16.2	16.0	5.0	360.0	256.0		5.15	3.00	9.0	220.2	396.00	504.00	4.0	75.00	
260	5.00	0 -0.12	275.0		16.2	16.0	5.0	375.0	268.0		5.15	4.00	12.0	226.0	553.00	538.00	4.0	80.00	
270	5.00		285.0	$+2.00$ -0.81	16.2	16.0	5.0	388.0	278.0	$+0.81$ 0	5.15	4.00	12.0	236.0	573.00	518.00	4.0	77.00	
280	5.00		295.0		16.2	16.0	5.0	400.0	288.0		5.15	4.00	12.0	246.0	593.00	499.00	4.0	74.00	
290	5.00		305.0		16.2	16.0	5.0	415.0	298.0		5.15	4.00	12.0	256.0	615.00	482.00	4.0	71.50	
300	5.00		315.0		16.2	16.0	5.0	435.0	308.0		5.15	4.00	12.0	266.0	636.00	466.00	4.0	69.00	

PS:基于45,000psi的凹槽材料屈服强度和安全系数，直角边缘线材
 您想要的各材料，各规格挡圈，我们都可为您定做，详细请咨询客户顾问



KC'系列B型 GB/T 893—2017

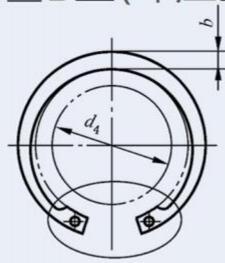


有耳孔用挡圈B型(冲压型) Retaining Ring With Lugs for Bores

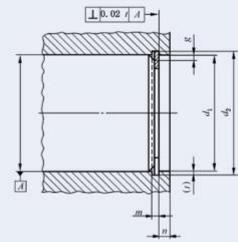
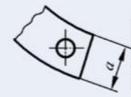
KC' - 0022

系列名称
Overlap Type

轴直径
(mm)



2.5 : 1
 $d_1 \geq 170$ mm由制造者确定



(B型)

公称规格 d_1	孔用挡圈								沟槽					其他					安装工具规格*
	s		d_1		a max	b^* ≈	d_2 min	千件 质量 ≈ kg	d_3^b		m^* H13	t	n min	d_4	F_N kN	F_R^d kN	g	F_{Rd}^d kN	
	基本 尺寸	极限 偏差	基本 尺寸	极限 偏差					基本 尺寸	极限 偏差									
20	1.50		21.5		4.5	2.4	2.0	1.41	21.0		1.60	0.50	1.5	10.5	5.40	16.0	1.0	5.60	
22	1.50		23.5		4.7	2.8	2.0	1.85	23.0	+0.13 0	1.60	0.50	1.5	12.1	5.90	18.0	1.0	6.10	
24	1.50		25.9	+0.42 -0.21	4.9	3.0	2.0	1.98	25.2		1.60	0.60	1.8	13.7	7.70	21.7	1.0	7.20	
25	1.50		26.9		5.0	3.1	2.0	2.16	26.2		1.60	0.60	1.8	14.5	8.00	22.8	1.0	7.30	2.0
26	1.50		27.9		5.1	3.1	2.0	2.25	27.2	+0.21 0	1.60	0.60	1.8	15.3	8.40	21.6	1.0	7.20	
28	1.50		30.1		5.3	3.2	2.0	2.48	29.4		1.60	0.70	2.1	16.9	10.50	20.8	1.0	7.00	
30	1.50	0 -0.06	32.1		5.5	3.3	2.0	2.84	31.4		1.60	0.70	2.1	18.4	11.30	21.4	1.0	7.20	
32	1.50		34.4		5.7	3.4	2.0	2.94	33.7		1.60	0.85	2.6	20.0	14.60	21.4	1.0	7.30	
34	1.75		36.5	+0.50 -0.25	5.9	3.7	2.5	4.20	35.7		1.85	0.85	2.6	21.6	15.40	35.6	1.5	8.60	
35	1.75		37.8		6.0	3.8	2.5	4.62	37.0		1.85	1.00	3.0	22.4	18.80	36.6	1.5	8.70	
37	1.75		39.8		6.2	3.9	2.5	4.73	39.0	+0.25 0	1.85	1.00	3.0	24.0	19.80	36.8	1.5	8.80	2.5
38	2.00		40.8		6.3	3.9	2.5	4.80	40.0		1.85	1.00	3.0	24.7	22.50	38.3	1.5	9.10	
40	2.00		43.5		6.5	3.9	2.5	5.38	42.5		2.15	1.25	3.8	26.3	27.00	58.4	2.0	10.90	
42	2.00		45.5	+0.90 -0.39	6.7	4.1	2.5	6.18	44.5		2.15	1.25	3.8	27.9	28.40	58.5	2.0	11.00	
45	2.00		48.5		7.0	4.3	2.5	6.86	47.5		2.15	1.25	3.8	30.3	30.20	56.5	2.0	10.70	
47	2.00	0 -0.07	50.5		7.2	4.4	2.5	7.00	49.5		2.15	1.25	3.8	31.9	31.40	57.0	2.0	10.80	
50	2.50		54.2		7.5	4.6	2.5	9.15	53.0		2.65	1.50	4.5	34.2	40.50	95.50	2.0	19.00	
52	2.50		56.2		7.7	4.7	2.5	10.20	55.0		2.65	1.50	4.5	35.8	42.00	94.60	2.0	18.80	
55	2.50		59.2		8.0	5.0	2.5	10.40	58.0		2.65	1.50	4.5	38.2	44.40	94.70	2.0	19.60	
60	3.00		64.2		8.5	5.4	2.5	16.60	63.0		3.15	1.50	4.5	42.1	48.30	137.00	2.0	29.20	3.0
62	3.00		66.2	+1.10 -0.46	8.6	5.5	2.5	16.80	65.0	+0.30 0	3.15	1.50	4.5	43.9	49.80	137.00	2.0	29.20	
65	3.00		69.2		8.7	5.8	3.0	17.20	68.0		3.15	1.50	4.5	46.7	51.80	174.00	2.5	30.00	
68	3.00	0 -0.08	72.5		8.8	6.1	3.0	19.20	71.0		3.15	1.50	4.5	49.5	54.50	174.50	2.5	30.60	
70	3.00		74.5		9.0	6.2	3.0	19.80	73.0		3.15	1.50	4.5	51.1	56.20	171.00	2.5	30.30	
72	3.00		76.5		9.2	6.4	3.0	21.70	75.0		3.15	1.50	4.5	52.7	58.00	172.00	2.5	30.30	
75	3.00		79.5		9.3	6.6	3.0	22.60	78.0		3.15	1.50	4.5	55.5	60.00	170.00	2.5	30.30	
80	4.00		85.5		9.5	7.0	3.0	35.20	83.5		4.15	1.75	5.3	60.0	74.60	308.00	2.5	56.00	
85	4.00		90.5		9.7	7.2	3.5	38.80	88.5		4.15	1.75	5.3	64.6	79.50	358.00	3.0	55.00	
90	4.00	0 -0.10	95.5	+1.30 -0.54	10.0	7.6	3.5	41.50	93.5	+0.35 0	4.15	1.75	5.3	69.0	84.00	354.00	3.0	56.00	3.0
95	4.00		100.5		10.3	8.1	3.5	46.70	98.5		4.15	1.75	5.3	73.4	88.60	347.00	3.0	56.00	
100	4.00		105.5		10.5	8.4	3.5	50.70	103.5		4.15	1.75	5.3	78.0	93.10	335.00	3.0	55.00	

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
您想要的各材料, 各规格挡圈, 我们都可为您定做, 详细请咨询客户顾问

What is 开口挡圈

A RETAINING RING?

开口挡圈是一种用于轴类零件轴向定位的简易机械紧固件，主要作用是限制轴上零部件(如齿轮、轴承、垫片等)的轴向位移，防止其从轴上脱落，适用于负荷较小、对定位精度要求不高的场景。

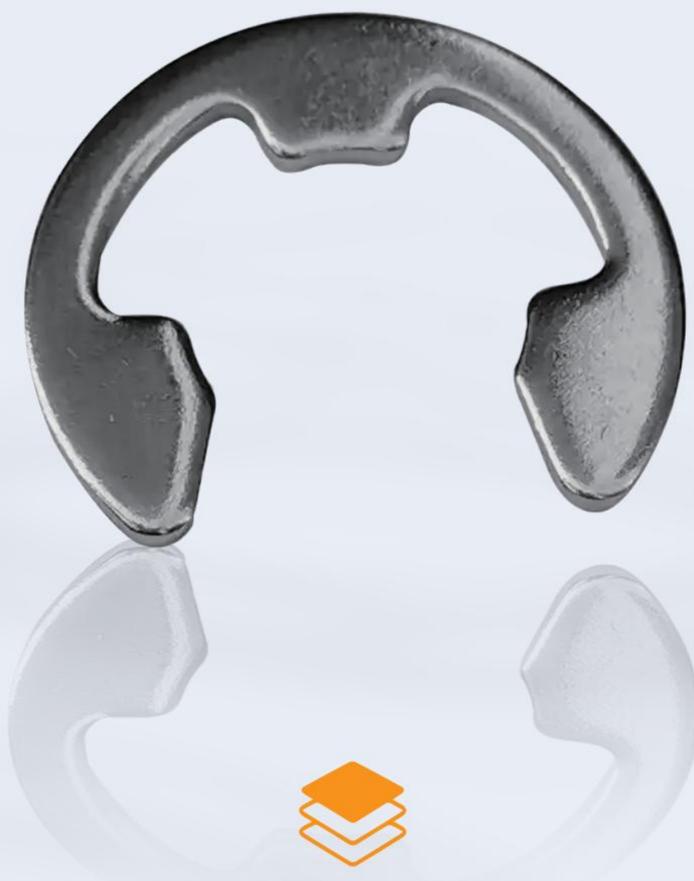
The split retaining ring is a simple mechanical fastener used for axial positioning of shaft parts. Its main function is to limit the axial displacement of components on the shaft (such as gears, bearings, gaskets, etc.) and prevent them from falling off the shaft. It is suitable for scenarios with small loads and low requirements for positioning accuracy.



OC'系列

GB/T 896—2020

开口挡圈(冲压型) Open Retaining Ring



有凸耳



种类多样



自由定制



OC'系列

GB/T 896—2020

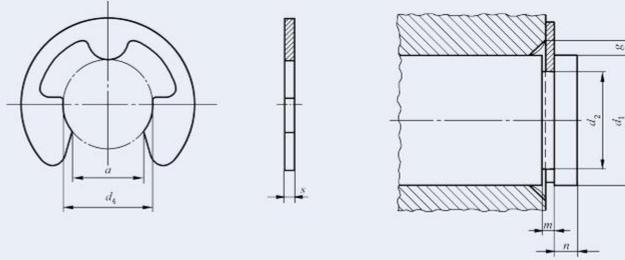
开口挡圈(冲压型) Open Retaining Ring



OC' - 0015

系列名称
Overlap Type

轴直径
(mm)



公称直径 d_1	d_1	开口挡圈						沟槽						补充数据							
		s		a		d_2		千件质量 \approx kg $\rho=7.84 \text{ g/cm}^3$	d_3		m^*		n	d_4	F_N		F_R		g	F_{Re}	n_{abl}
		基本尺寸	极限偏差	基本尺寸	极限偏差	基本尺寸	极限偏差		基本尺寸	极限偏差	基本尺寸	极限偏差			min	max	kN	d_1^\dagger			
0.8	$1 \leq d_1 \leq 1.4$	0.20		0.58		0.74	0 -0.040	0.003	0.8	0 -0.01	0.24		0.4	2.25	0.03	1.2	0.08	0.30	0.04	50 000	
1.2	$1.4 \leq d_1 \leq 2$	0.30		1.01		1.12	0 -0.060	0.009	1.2		0.34	$+0.04$ -0	0.6	3.25	0.04	1.5	0.12	0.40	0.06	47 000	
1.5	$2 \leq d_1 \leq 2.5$	0.40		1.28		1.41	0 -0.060	0.021	1.5	0 -0.06	0.44		0.8	4.25	0.07	2.0	0.22	0.60	0.11	43 000	
1.9	$2.5 \leq d_1 \leq 3$	0.50		1.61	± 0.040	1.80	0 -0.060	0.040	1.9		0.54		1.0	4.80	0.10	2.5	0.35	0.70	0.17	40 000	
2.3	$3 \leq d_1 \leq 4$	0.60		1.94		2.20	0 -0.060	0.069	2.3		0.64		1.0	6.30	0.15	3.0	0.50	0.90	0.24	38 000	
3.2	$4 \leq d_1 \leq 5$	0.60	± 0.02	2.70		3.06	0 -0.075	0.088	3.2		0.64		1.0	7.30	0.22	4.0	0.65	0.90	0.32	35 000	
4	$5 \leq d_1 \leq 7$	0.70		3.34		3.85	0 -0.075	0.158	4.0	0 -0.075	0.74	$+0.05$ -0	1.2	9.30	0.25	5.0	0.95	1.00	0.47	32 000	
5	$6 \leq d_1 \leq 8$	0.70		4.11		4.83	0 -0.075	0.236	5.0		0.74		1.2	11.30	0.90	7.0	1.15	1.00	0.60	28 000	
6	$7 \leq d_1 \leq 9$	0.70		5.26	± 0.048	5.81	0 -0.075	0.255	6.0		0.74		1.2	12.30	1.10	8.0	1.35	1.10	0.70	25 000	
7	$8 \leq d_1 \leq 11$	0.90		5.84		6.79	0 -0.075	0.474	7.0		0.94		1.5	14.30	1.25	9.0	1.80	1.30	1.00	22 000	
8	$9 \leq d_1 \leq 12$	1.00		6.52		7.75	0 -0.090	0.660	8.0		1.05		1.8	16.30	1.42	10.0	2.50	1.50	1.25	20 000	
9	$10 \leq d_1 \leq 14$	1.10		7.63	± 0.058	8.73	0 -0.090	1.090	9.0	0 -0.09	1.15		2.0	18.80	1.60	11.0	3.00	1.61	1.50	17 000	
10	$11 \leq d_1 \leq 15$	1.20		8.32		9.71	0 -0.090	1.250	10.0		1.25		2.0	20.40	1.70	12.0	3.50	1.80	1.75	15 000	
12	$13 \leq d_1 \leq 18$	1.30		10.45		11.65	0 -0.110	1.630	12.0	0 -0.11	1.35	$+0.08$ -0	2.5	23.40	3.10	15.0	4.70	1.90	2.30	13 000	
15	$16 \leq d_1 \leq 24$	1.50	± 0.03	12.61	± 0.070	14.59	0 -0.110	3.370	15.0		1.55		3.0	29.40	7.00	20.0	7.80	2.20	3.30	11 000	
19	$20 \leq d_1 \leq 31$	1.75		15.92		18.49	0 -0.130	6.420	19.0		1.80		3.5	37.60	10.00	25.0	11.00	2.50	3.60	7 600	
24	$25 \leq d_1 \leq 38$	2.00		21.88		23.39	0 -0.130	8.550	24.0	0 -0.13	2.05		4.0	44.60	13.00	30.0	15.00	3.00	4.00	5 500	
30	$32 \leq d_1 \leq 42$	2.50		25.80	± 0.084	29.25	0 -0.150	13.500	30.0		2.55		4.5	52.60	16.50	36.0	23.00	3.50	5.30	4 200	

代号

- a 支耳径向宽度
Radial width of lug
- d₁ 轴径
Shaft diameter
- d₂ 公称直径=槽径
Nominal diameter=groove diameter
- d₃ 挡圈安装到沟槽内的外径尺寸
Outer diameter of the retaining ring when installed in the groove
- d₄ 挡圈内径
Inner diameter of the ring
- F_N 材料下屈服强度 ReL=200 MPa 的沟槽承载能力
Groove load capacity with material lower yield strength ReL=200 MPa
- F_R 直角接触的挡圈承载能力
Load capacity of retaining ring with right-angle contact
- F_{Rg} 倒角接触的挡圈承载能力
Load capacity of retaining ring with chamfer contact
- g 零件倒角尺寸
Part chamfer size
- m 槽宽
Groove width
- n 边距
Margin
- n_{abl} 挡圈极限转速
Limiting speed of retaining ring
- ReL 材料下屈服强度
Material lower yield strength
- s 挡圈厚度
Thickness of retaining ring

PS:基于45,000psi的凹槽材料屈服强度和安全系数, 直角边缘线材
您想要的各材料, 各规格挡圈, 我们都可为您定做, 详细请咨询客户顾问

WAVE SPRING AND WINDING RING

波形弹簧及绕制挡圈

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.

搭口波簧 Overlap Type-WO Series



缺口波簧 Gap Type-WG Series



叠型波簧 Stacked Wave Springs



闭口波簧 Closed-end Type-DC Series



平顶波簧 Flat Wave Springs



对顶波簧 Counter Wave Springs



平垫圈 Flat Washer Type-WF Series



圆线波簧 Wave Springs-WR Series



线型波簧 Linear Springs-WL Series



侧波型 Side Linear Springs-WE Series



WAVE SPRING AND WINDING RING 波形弹簧及绕制挡圈

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 disas-semble.It is divided into positioning ring and wave ring.

等截面外挡圈 Equal Section Outer Retaining Ring



等截面内挡圈 Equal Section Inner Retaining Ring



自锁挡圈 Self-locking Retaining Ring



螺旋内挡圈 Spiral Inner Retaining Ring



螺旋外挡圈 Spiral Outer Retaining Ring



波形内挡圈 Corrugated Inner Retaining Ring



波形外挡圈 Corrugated Outer Retaining Ring



扁线内挡圈 Flat Wire Inner Retaining Ring



扁线外挡圈 Flat Wire Outer Retaining Ring



STAMPED RETAINING RING

冲压挡圈

冲压挡圈的种类:轴用挡圈、孔用挡圈和开口挡圈

- 轴用挡圈分为无耳轴用挡圈,有耳轴用挡圈。
- 孔用挡圈分为无耳孔用挡圈,有耳孔用挡圈。
- 开口挡圈分为C形挡圈,带舌开口挡圈。

Types of stamped retaining ring: shaft、hole retaining ring and split retaining ring

- Types of shaft retaining ring: shaft retaining rings without lugs, shaft retaining ring with lugs.
- Types of hole retaining ring: hole retaining ring without lugs, hole retaining ring with lugs.
- Types of split retaining ring: C-shaped retaining ring, tongue-type split retaining ring.

冲压型挡圈

- 通过冲压工艺制成的环形零部件,主要用于固定和限位其他零件,防止其轴向或径向位移。

Stamped Retaining ring

- A ring-shaped component made through stamping processes, mainly used to fix and limit other parts, preventing their axial or radial displacement.

开口挡圈 Open Retaining Ring



有耳孔用挡圈 Retaining Ring With Lugs for Bores



有耳轴用挡圈 Retaining Ring With Lugs for Shafts



质量证书 QUALITY CERTIFICATE

Certificate of Registration

This is to certify that the Quality Management System of:

Mascot Technology (Jiangsu) Co., Ltd.
 No. 161, Fada Road, Loudong Street, Taicang, Suzhou City, Jiangsu Province, 215400, China
 (IATF USI: GLRR6X)
 (See appendix for additional locations)

applicable to:

Manufacturing of hardware spring, sealing ring

has been assessed and registered by NQA, Warwick House, Houghton Hall Park, Houghton Regis, Dunstable, LU5 5ZX, UK against the provisions of:

IATF 16949:2016
 (Clause 8.3 product design of IATF 16949:2016 is justifiably excluded)

This registration is subject to the company maintaining a quality management system to the above standard, which will be monitored by NQA.

Managing Director

NQA Certificate No: **T201042**
 IATF Certificate No: **0563659**
 First Issue Date: **24 January 2025**
 Valid Until: **23 January 2028**
 Version: **1**

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 Revision Date: Feb 2017 Page 1 of 2 Issue 5

Certificate of Registration

Appendix to Certificate Number **T201042**

For: **Mascot Technology (Jiangsu) Co., Ltd.**
 Includes support locations:
Shanghai Mascot Industrial Co., Ltd.
 Zone C, Building 1, No. 58, Lianxing Road, Anting Town, Jiading District, Shanghai City, China
 (IATF USI: 6MR9LZ)

Applicable to:
contract review, customer service, sales

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 Revision Date: Feb 2017 Page 2 of 2 Issue 5

公司于2024年在苏州购买的20亩工业用地

20 acres of industrial land purchased by the company in Suzhou in 2024

20000平方米在建厂房效果图 将在2026年8月竣工

Rendering of a 20000 square meter factory under construction It will be completed in August 2026



OTHER PRODUCTS OF MASCOT 敏硕其他产品





微信公众号
WeChat Official Account



微信
WeChat



网站
Website



抖音号
TikTok



微信视频号
WeChat Channels

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