Pursuing
The Precision
Serving
The World

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杠杆指示表
Dial Test Indicator

B

公制杠杆指示表
Metric Dial Test Indicators

英制杠杆指示表
Inch Dial Test Indicators

公英制杠杆指示表
Metric–Inch Dial Test Indicators

大量程杠杆指示表
Long Range Dial Test Indicators

平行式杠杆指示表
Parallel Dial Test Indicators

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杠杆指示表是利用机械传动系统，将测杆的位移转变为指示表指针的角位移，并由指示表进行读数的测量器具。主要用于测量工件的形状尺寸及位置精度。

执行标准：按中国标准GB／T8123 制造。还可按美国标准ASME B89.1.10M、日本工业标准JIS B7533和国际标准ISO9493制造。

The dial test indicator is used to shift the dispiacement of the contact point to angle displacement of the point on the dial plate by mechanical transmission system. It can measure the dimensions, shapes and position precisions of the workpieces. The dial test indicator are manufactured according to the standard GB／T8123, ASME B89.1.10M and JIS B7533 and ISO9493.

杠杆指示表功能特点：

1. 主体采用高质量黄铜和高强度的锌铝合金材料，关键零件选用非磁性材料，所有型号都具有高的抗磁性能和灵敏度。
2. 所有型号皆带钻、耐用、防震。
3. 杠杆测头的轴承采用微型球轴承。因此灵敏度高，指示稳定。
4. 测量力小，仅0.3 N，所以特别适合薄壁零件的测量，测头可选用硬质合金钢球，延长使用寿命。
5. 测量杆转动范围大，220° ，主体有3处燕尾槽，便于装卡。
6. 根据要求可提供渐开线形状测头。

SPECIFICATION AND FUNCTION

1. Main bodies are machined from high quality brass or zinc—aluminium alloy. Crucial parts are made of special nonmagnetic materials, All models have high resistance to magnetism and sensitivity.
2. These models are all jeweled, durable, vibrationproof.
3. The bearing at the turning point of the contact point is a miniature bearing(pivot ball bearing). Accordingly, the indication is reliable with little effect of shaft clearance.
4. The measuring force is low, just 0.3N, so that these models are well suited for measurement with thin objects. The contact point is a carbide ball(optional), which has long durability.
5. The contact piont can be set at any desired angle within a circular arc of 220 degrees. have 3 doverails to suit attachments.
6. Involute—shaped contact points are produced to order.

杠杆指示表 DIAL TEST INDICATORS

公制杠杆指示表 Metric Dial Test Indicators

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422–102

411–102

412–401

412–602

加长测头杠杆指示表
Long Styli Dial Test Indicators

414–101

414–111

端面杠杆指示表
Vertical Dial Test Indicators

419–102

性能及特点

- 黄铜合金（锌铝合金）主体、抗磁性能高
- 机芯镶嵌红刚玉轴承，防震耐用
- 测杆传动采用滚珠轴承结构
- 测头钢球可选用硬质合金、人造刚玉和普通碳钢
- 3处燕尾槽

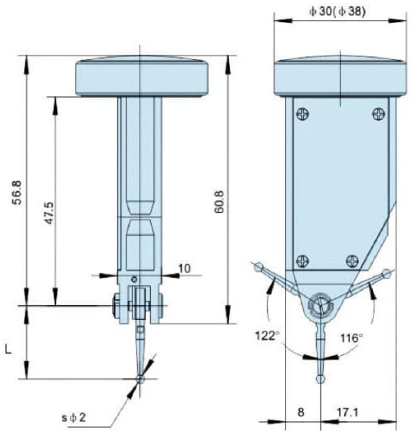
FEATURES

- High quality brass main bodies (Zinc aluminium alloy) high resistance to magnetism
- Jeweled,vibrationproof,durable
- Pivot ball bearing
- Carbide, jewel or steel ball contact point
- Three dovetails

杠杆指示表 DIAL TEST INDICATORS

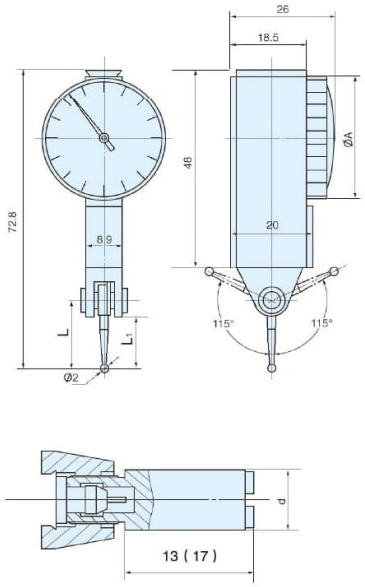
公制杠杆指示表 Metricl Dial Test Indicators

外形尺寸图 DIMENSIONS(mm)



417–101

外形尺寸图 DIMENSIONS(mm)



主要技术参数 SPECIFICATIONS

货号	型号	分度值	量程	尺寸Dimensions(mm)					备注
Nr.	Model	Grad.(mm)	Range (mm)	A	d1	d2	L	L1	
411–101	WL88A	0.01	0.8	Ø30	Ø8	Ø6	16.5	12.5	
411–102	WL88B	0.01	0.8	Ø37.5	Ø8	Ø6	16.5	12.5	
412–401	WL86	0.002	0.2	Ø30	Ø8	Ø6	16.0	12.0	
412–402	WL86	0.002	0.2	Ø37.5	Ø8	Ø6	16.0	12.0	
412–602	WL86	0.001	0.2	Ø37.5	Ø8	Ø6	16.0	12.0	
414–101	WL88D	0.01	0.8	Ø30	Ø8	Ø6	46.4	42.4	
414–102	WL88D	0.01	0.8	Ø37.5	Ø8	Ø6	46.4	42.4	
414–111	WL88M	0.01	0.8	Ø30	Ø8	Ø6	30.5	26.5	
414–112	WL88M	0.01	0.8	Ø37.5	Ø8	Ø6	30.5	26.5	
416–101	WL88H	0.01	0.8	Ø30	Ø8	Ø6	16.5	12.5	
416–102	WL88H	0.01	0.8	Ø37.5	Ø8	Ø6	16.5	12.5	
417–101	WL88G	0.01	0.8	Ø30	Ø8	Ø6	16.5	12.5	
417–102	WL88G	0.01	0.8	Ø37.5	Ø8	Ø6	16.5	12.5	
418–101	WL88H	0.002	0.2	Ø30	Ø8	Ø6	16.0	12.0	
418–102	WL88H	0.002	0.2	Ø37.5	Ø8	Ø6	16.0	12.0	
419–101	WL88K	0.002	0.2	Ø30	Ø8	Ø6	16.0	12.0	
419–102	WL88K	0.002	0.2	Ø37.5	Ø8	Ø6	16.0	12.0	
420–101	WL88J	0.01	1.6	Ø30	Ø8	Ø6	16.5	12.5	
420–102	WL88J	0.01	1.6	Ø37.5	Ø8	Ø6	16.5	12.5	
422–101	WL88D	0.01	0.8	Ø30	Ø8	Ø6	16.5	12.5	锌铝合金 Zinc–aluminium alloy
422–102	WL88D	0.01	0.8	Ø37.5	Ø8	Ø6	16.5	12.5	锌铝合金 Zinc–aluminium alloy
424–101	WL91	0.01	0.5	Ø30	Ø8	Ø6	16.5	12.5	
424–102	WL91B	0.01	0.5	Ø37.5	Ø8	Ø6	16.5	12.5	

杠杆指示表 DIAL TEST INDICATORS

公制杠杆指示表 Metric Dial Test Indicators

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B05
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411–101G

411–102G

412–401G

412–402G

区间式杠杆百分表
Interval Scale Dial Test Indicators

426–102G

平行式杠杆百分表
Parallel Dial Test Indicators

425–102G

性能及特点

- 黄铜合金主体、抗磁性能高
- 机芯镶嵌红刚玉轴承，防震耐用
- 测杆传动采用滚珠轴承结构
- 测头钢球可选用硬质合金、人造刚玉和普通碳钢
- 3处燕尾槽
- 货号带“G”为“WL”品牌产品

FEATURES

- High quality brass main bodies
  high resistance to magnetism
- Jeweled,vibrationproof,durable
- Pivot ball bearing
- Carbide, jewel or steel ball contact point
- Three dovetails
- Nr with the "G" belong to the "WL" brand.

杠杆指示表 DIAL TEST INDICATORS

公制杠杆指示表 Metricl Dial Test Indicators

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B06
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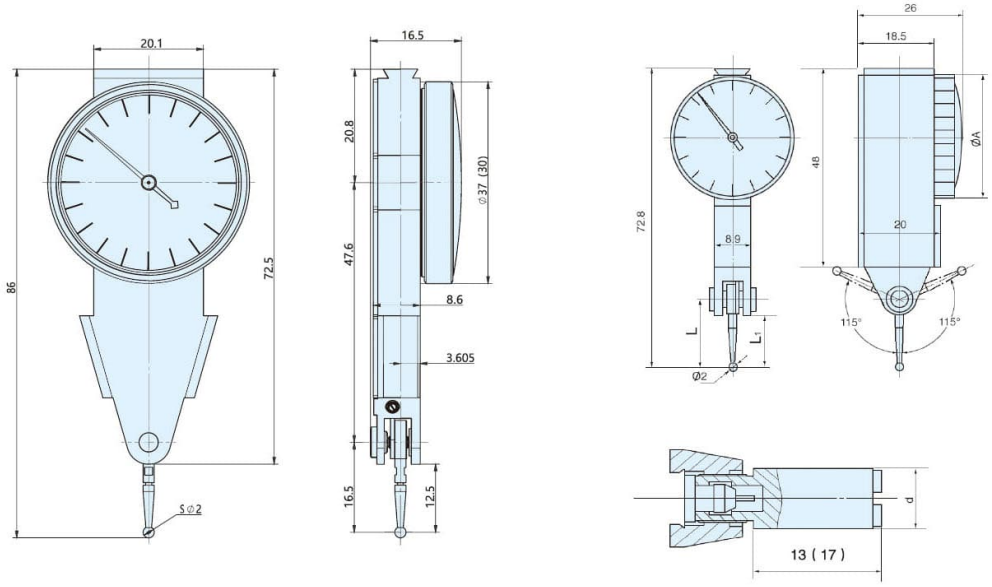
外形尺寸图 DIMENSIONS(mm)



主要技术参数 SPECIFICATIONS

货号	型号	分度值	量程	尺寸Dimensions(mm)					备注
Nr.	Model	Grad.(mm)	Range (mm)	A	d1	d2	L	L1	
411-101G	WL88A	0.01	0.8	∅30	∅8	∅6	16.5	12.5	
411-102G	WL88B	0.01	0.8	∅37.5	∅8	∅6	16.5	12.5	
412-401G	WL86	0.002	0.2	∅30	∅8	∅6	16.0	12.0	
412-402G	WL86	0.002	0.2	∅37.5	∅8	∅6	16.0	12.0	
426-101G	WL88A	0.01	0.8	∅30	∅8	∅6	16.5	12.5	
426-102G	WL88B	0.01	0.8	∅37.5	∅8	∅6	16.5	12.5	
425-101G	WL93	0.01	0.8	∅30	∅8	∅6	16.5	12.5	
425-102G	WL93	0.01	0.8	∅37.5	∅8	∅6	16.5	12.5	

杠杆指示表 DIAL TEST INDICATORS

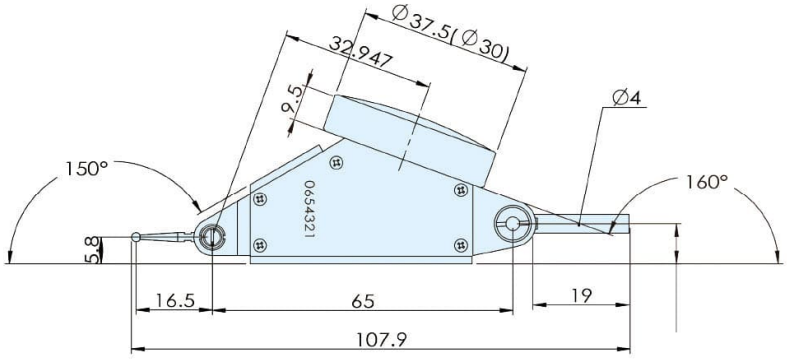
公制杠杆指示表 Metric Dial Test Indicators

大量程倾斜杠杆指示表
Long Range Tilted Face Dial Test Indicators

420–102

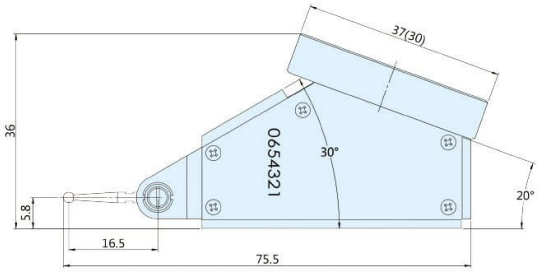
大量程杠杆指示表刻度盘示意图

外形尺寸图 DIMENSIONS(mm)



倾斜杠杆指示表
Tilted Face Dial Test Indicators

外形尺寸图 DIMENSIONS(mm)



416–102

418–102

杠杆指示表 DIAL TEST INDICATORS

锌铝合金杠杆指示表 Zinc-Aluminium Alloy Dial Test Indicators

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422-101

422-301

金属表圈可提供银灰色、黑色、蓝色、金色和红色等

杠杆指示表 DIAL TEST INDICATORS

英制杠杆指示表 Inch Dial Test Indicators

主要技术参数 SPECIFICATIONS

货号	型号	分度值	量程	尺寸Dimensions(mm)					备注
Nr.	Model	Grad.(mm)	Range (in)	A	d1	d2	L	L1	
411-201	WL99-1	0.001"	0.03"	1.18"	3/8"	5/32"	0.62"	0.35"	Standard Type
411-202	WL99-1	0.001"	0.03"	1.48"	3/8"	5/32"	0.62"	0.35"	Standard Type
411-301	WL99-2	0.0005"	0.03"	1.18"	3/8"	5/32"	0.62"	0.35"	Standard Type
411-302	WL99-2	0.0005"	0.03"	1.48"	3/8"	5/32"	0.62"	0.35"	Standard Type
412-501	WL85	0.0001"	0.008"	1.18"	3/8"	5/32"	0.64"	0.37"	Standard Type
412-502	WL85	0.0001"	0.008"	1.48"	3/8"	5/32"	0.64"	0.37"	Standard Type
413-301	WL99-2	0.01mm/0.0005"	0.6mm/0.03"	1.48"	3/8"	5/32"	0.62"	0.35"	Standard Type
414-301	WL99-2	0.0005"	0.03"	1.18"	3/8"	5/32"	1.74"	1.47"	Long Styli Type
414-302	WL99-2	0.0005"	0.03"	1.48"	3/8"	5/32"	1.74"	1.47"	Long Styli Type
414-311	WL88M	0.0005"	0.03"	1.18"	3/8"	5/32"	1.14"	0.99"	Long Styli Type
414-312	WL88M	0.0005"	0.03"	1.48"	3/8"	5/32"	1.14"	0.99"	Long Styli Type
416-201	WL88H	0.001"	0.03"	1.18"	3/8"	5/32"	0.62"	0.35"	Tilted Face Type
416-202	WL88H	0.001"	0.03"	1.48"	3/8"	5/32"	0.62"	0.35"	Tilted Face Type
416-301	WL88H	0.0005"	0.03"	1.18"	3/8"	5/32"	0.62"	0.35"	Tilted Face Type
416-302	WL88H	0.0005"	0.03"	1.48"	3/8"	5/32"	0.62"	0.35"	Tilted Face Type
417-201	WL88G	0.001"	0.03"	1.18"	3/8"	5/32"	0.62"	0.35"	Vertical Type
417-202	WL88G	0.001"	0.03"	1.48"	3/8"	5/32"	0.62"	0.35"	Vertical Type
417-301	WL88G	0.0005"	0.03"	1.18"	3/8"	5/32"	0.62"	0.35"	Vertical Type
417-302	WL88G	0.0005"	0.03"	1.48"	3/8"	5/32"	0.62"	0.35"	Vertical Type
418-501	WL88H	0.0001"	0.008"	1.18"	3/8"	5/32"	0.64"	0.37"	Tilted Face Type
418-502	WL88H	0.0001"	0.008"	1.48"	3/8"	5/32"	0 64"	0 37"	Tilted Face Type
419-501	WL88K	0.0001"	0.008"	1.18"	3/8"	5/32"	0.64"	0.37"	Vertical Type
419-502	WL88K	0.0001"	0.008"	1.48"	3/8"	5/32"	0 64"	0 37"	Vertical Type
420-201	WL88J	0.001"	0.06"	1.18"	3/8"	5/32"	0.62"	0.35"	Long Range Tilted Type
420-202	WL88J	0.001"	0.06"	1.48"	3/8"	5/32"	0.62"	0.35"	Long Range Tilted Type
420-301	WL88J	0.0005"	0.06"	1.18"	3/8"	5/32"	0.62"	0.35"	Long Range Tilted Type
420-302	WL88J	0.0005"	0.06"	1.48"	3/8"	5/32"	0.62"	0.35"	Long Range Tilted Type
421-201	WL88N	0.001"	0.06"	1.18"	3/8"	5/32"	0.62"	0.35"	Long Range Vertical Type
421-202	WL88N	0.001"	0.06"	1.48"	3/8"	5/32"	0.62"	0.35"	Long Range Vertical Type
421-301	WL88N	0.0005"	0.06"	1.18"	3/8"	5/32"	0.62"	0.35"	Long Range Vertical Type
421-302	WL88N	0.0005"	0.06"	1.48"	3/8"	5/32"	0.62"	0.35"	Long Range Vertical Type
422-201	WL99-1	0.001"	0.03"	1.18"	3/8"	5/32"	0.62"	0.35"	锌铝合金 Zinc-aluminium alloy
422-202	WL99-1	0.001"	0.03"	1.48"	3/8"	5/32"	06 2"	0.35"	
422-301	WL99-2	0.0005"	0.03"	1.18"	3/8"	5/32"	0.62"	0.35"	
422-302	WL99-2	0.0005"	0.03"	1.48"	3/8"	5/32"	0.62"	0.35"	
423-301	WL99-2	0.01mm/0.0005"	0.6mm/0.03"	1.48"	3/8"	5/32"	0.62"	0.35"	
424-301	WL91	0.0005"	0.02 "	1.18"	3/8"	5/32"	0.65"	0.49"	Standard Type
424-302	WL91B	0.0005"	0.02"	1.48"	3/8"	5/32"	0.65"	0.49"	Standard Type
425-201	WL93	0.001"	0.03"	1.18"	3/8"	5/32"	0.62"	0.35"	Standard Type
425-202	WL93	0.001"	0.03"	1.48"	3/8"	5/32"	0.62"	0.35"	Standard Type
425-301	WL93	0.0005"	0.03"	1.18"	3/8"	5/32"	0.62"	0.35"	Standard Type
425-302	WL93	0.0005"	0.03"	1.48"	3/8"	5/32"	0.62"	0.35"	Standard Type

杠杆指示表 DIAL TEST INDICATORS

英制杠杆指示表 Inch Dial Test Indicators

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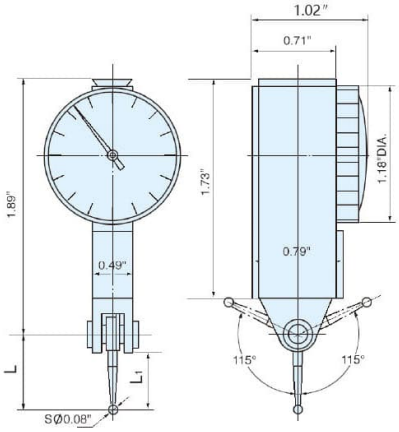
411–201

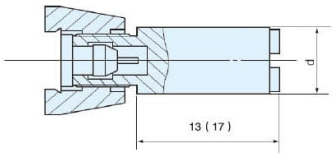
411–301

412–501

413–301

外形尺寸图 DIMENSIONS(inch)





424–301

421–301

杠杆指示表 DIAL TEST INDICATORS

英制杠杆指示表 Inch Dial Test Indicators

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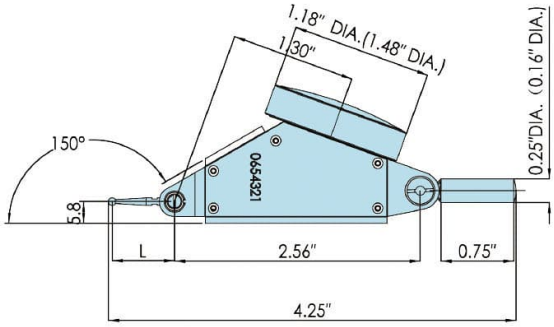
英制大量程杠杆指示表

Inch Large Range Dial Test Indicators

420–201

420–301

外形尺寸图 DIMENSIONS(inch)



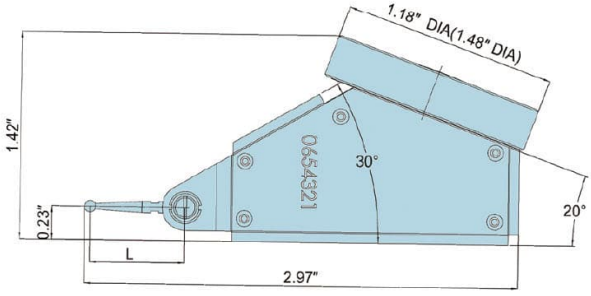
英制倾斜杠杆指示表

Inch ticted face dial test indicators

416–302

418–502

外形尺寸图 DIMENSIONS(inch)



杠杆指示表 DIAL TEST INDICATORS

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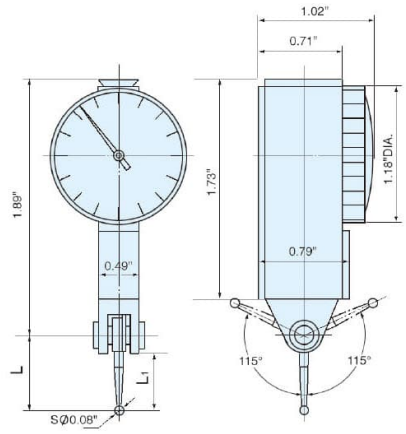
英制加长测头杠杆指示表
Inch Long Styli Dial Test Indicators

外形尺寸图 DIMENSIONS(inch)



414–311

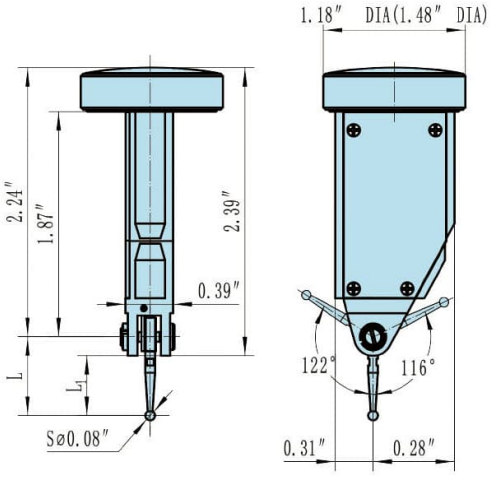
414–301

英制端面杠杆指示表
Inch Vertical Dial Test Indicators

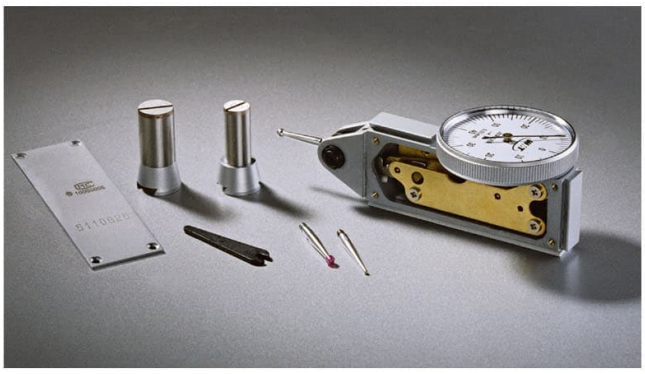
外形尺寸图 DIMENSIONS(inch)

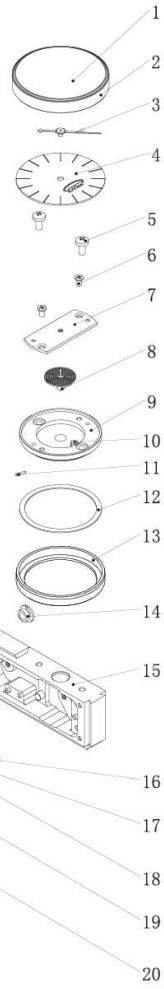
417–302

419–502



杠杆指示表附件
DIAL TEST INDICATORS ACCESSORIES



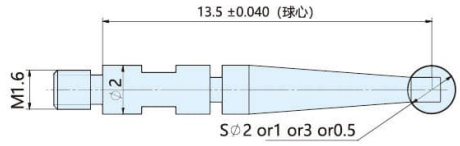


调心支架组件外形图 DIMENSIONS(mm)

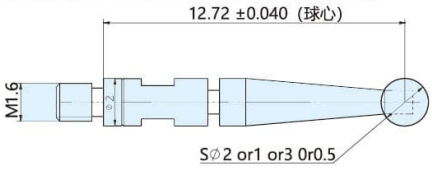
序号 Index No.	名称 Parts Name	备注 Note	序号 Index No.	名称 Parts Name	备注 Note	序号 Index No.	名称 Parts Name	备注 Note
1	表玻璃glass		10	游丝支柱spring stanchion		19	端面齿轮部件crown gear assy	千分需更换
2	表盖bezel		11	游丝销spring pin		20	上夹板部件top plate assy	
3	指针部件hand assy		12	弹簧圈tension spring		21	紧固螺钉screw for top plate	
4	刻度盘dial plate		13	回转盘outer ring		22	后盖板back	
5	固定盘紧固螺钉screw for inner ring		14	轴承B部件 B pivot bearing assy		23	紧固螺钉screw for back	
6	轴承板紧固螺钉screw for bear plate		15	主体部件main body assy	千分需更换	24	紧固螺母nut	
7	轴承板部件bear plate assy		16	测力弹簧spring		25	轴承A部件 A pivot bearing assy	
8	中心齿轮部件部件center gear assy	千分需更换	17	紧固螺钉screw for spring		26	杠杆测头部件contact point assy	千分需更换
9	固定盘部件inner ring assy	千分需更换	18	杠杆齿轮部件sector gear assy	千分需更换	27	行程螺钉stop screw	

杠杆指示表附件
DIAL TEST INDICATORS ACCESSORIES

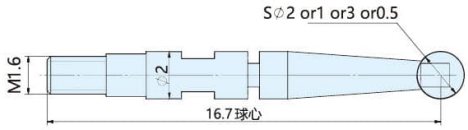
公制百分测头杆外形尺寸图 DIMENSIONS(mm)



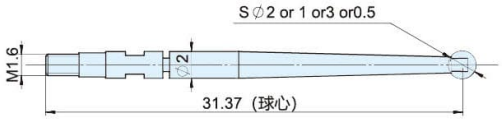
英制测头杆外形尺寸图 DIMENSIONS(mm)



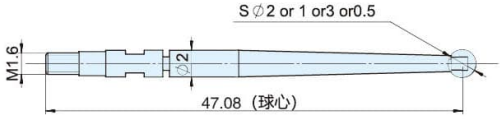
公制千分测头杆外形尺寸图 DIMENSIONS(mm)



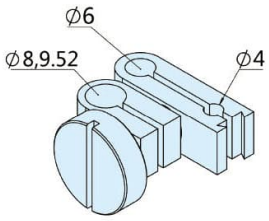
公制加长测头杆WL88M外形尺寸图 DIMENSIONS(mm)



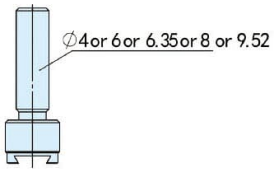
公制加长测头杆WL88D外形尺寸图 DIMENSIONS(mm)



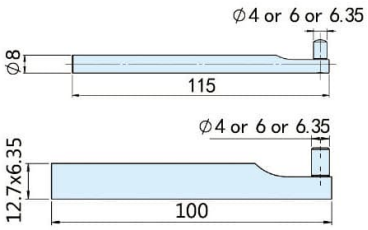
紧固器组件外形尺寸图 DIMENSIONS(mm)



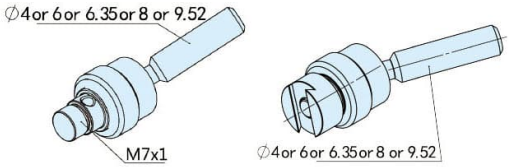
不锈钢夹持柄组件外形尺寸图 DIMENSIONS(mm)



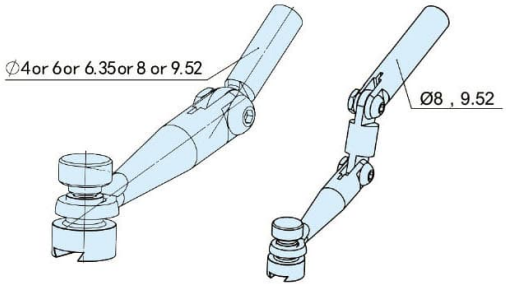
夹持棒(扁)外形尺寸图 DIMENSIONS(mm)



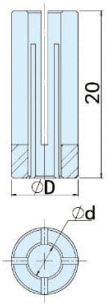
万能支架带螺柱(燕尾)外形尺寸图 DIMENSIONS(mm)



单(双)臂支架外形尺寸图 DIMENSIONS(mm)



公英制转换套外形尺寸图 DIMENSIONS(mm)



规格	d	D
4–6	4	6
4–6.35	4	6.35
4–8	4	8
4–9.52	4	9.52
6–8	6	8
6.35–8	6.35	8
6.35–9.52	6.35	9.52
8–9.52	8	9.52