

简单功能低价格的数显指示表

ABS数显指示表ID-SX

高性价比型

使用方便，包括必需功能，采用“钮扣电池(SR44)”的指示表。

0.01mm和0.001mm两种最小分辨力显示。

达到IP53尘/水防护标准

ID-S112X的配置达到IP53尘/水防护标准。



ABS (ABOSOLUTE)传感器

采用三丰公司独立开发的ABS(ABSOLUTE)传感器，即便切断电源也能再现原点位置。每次接通电源时不再需要核对原点位置，也不会发生超速误差，可靠性进一步提高。

电池寿命长

钮扣电池(SR44:1个)，可以连续工作约20,000小时(ID-S1012X)。





规格

货号	型号	测量范围	最小分辨率	宽范围精度	回程误差	重复精度	后盖型	测力	保护等级 ^{*1}	电池寿命	主机重量
543-781	ID-S1012X	12.7mm	0.01mm	0.02mm 以下	0.02mm 以下	0.01mm 以下	带耳后盖	1.5N以下	IP42	约20,000小时 (连续工作) 约6年 ^{*2} (一般使用情况下)	150g
543-781B	ID-S1012XB						平行后盖				140g
543-790	ID-S112X		0.001mm	0.003mm 以下	0.002mm 以下	0.002mm 以下	带耳后盖	1.5N以下	IP42	约18,000小时 (连续工作) 约5.4年 ^{*2} (一般使用情况下)	150g
543-790B	ID-S112XB						平行后盖				140g
543-794	ID-S112PX		0.001mm	0.003mm 以下	0.002mm 以下	0.002mm 以下	带耳后盖	2.5N以下	IP53		155g
543-794B	ID-S112PXB						平行后盖				155g

* 宽范围精度、回程误差、重复精度适用于20°C通常测量下的精度，且不包括±1允许范围的量化误差。

*1：安装盖子时才有效。卸下盖子时，安装提升相关的附件和连接电缆时则无效。

*2：电池寿命，视使用次数和用法的不同而不同。上述日数仅作为基准参考。

通用规格

- 显示：6位LCD显示
- 测针：球面针尖SR=1.5mm(硬质合金)货号**901312**
- 测针安装规格：M2.5×0.45(三丰指示表通用)
- 适宜测量位置：所有
- 检测方式：ABSOLUTE静电电容式线性编码器
- 电源：SR44(纽扣式氧化银电池)1个货号**938882**
(显示屏用纽扣式氧化银电池1个 标准配件)
- 最大反应速度：无限制(不支持扫描型测量)
- 运行温度范围：0°C ~ 40°C
- 存储温度范围：-10°C ~ 60°C

可选配件

- 测杆升降用
测杆提升杆(No.21EZA198)
测杆提升旋钮(No.21EZA105)
测杆提升电缆(No.540774)
- SPC连接电缆(测量数据输出用)1m(No.905338), 2m(No.905409)
- 三丰Digimatic微型处理器
- 三丰指针式指示表测头



- 支持三丰标准(2系列)指示表用的各种后盖
- 测量台架

详情信息请参考我公司综合目录NO.13

尘/水防护等级达到IP53

等级5：防尘

虽不能完全防止灰尘进入，但侵入的灰尘量并不会影响仪器的正常工作。

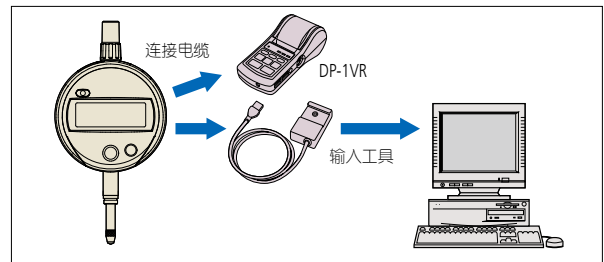
等级3：防喷射

垂直至60度落下的雨水不会产生负面影响。

各种保护等级的试验条件的详细信息，请参照IEC60529:2001, JIS C 0920:2003。

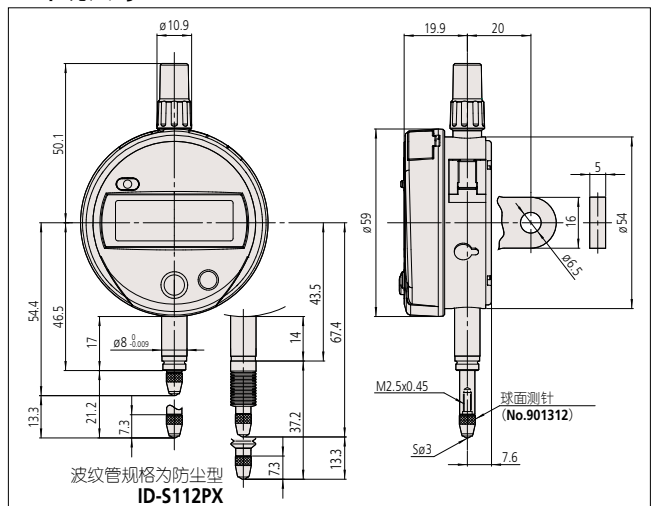
功能

- 原点设置(调零)
可在任何选定的位置调零
- 方向转换
测量方向可以转换
- 误差警告
- 测量数据输出
具有测量数据输出插口，通过输入工具能够输出测量结果到DP-1VR微型处理器或PC上



详情信息请参考我公司综合目录NO.13

外观尺寸





An inspection certificate is supplied as standard. Refer to page X for details.

Technical Data

Display: 6-digit LCD and sign
 Scale type: ABSOLUTE electrostatic linear encoder
 Usable orientation: All
 Power supply: SR44, part No. **938882** for initial operational checks (standard accessory)
 Maximum response speed: No limit (scan-type measurement is not supported)
 Operating temperature range: 0 to 40°C
 Storage temperature range: -10 to 60°C

Functions

Origin set (zero-set) : The display can be zeroed at any chosen position.
 Direction switching : The measuring direction can be switched.
 in/mm reading (inch/mm models only)
 Measurement data output: These indicators have a measurement data output socket, which makes it possible to output measurement to the DP-1VR mini processor or to a PC through an input tool. Furthermore, the U-WAVE measurement data wireless communication system can be used to wirelessly input measurement data to a PC.
 Error warning

Optional accessories

- Lifting**
 - Lifting lever **No.21EZA198** (ISO/JIS/DIN Type), **No.21EZA199** (ASME/ANSI/AGD Type)
 - Lifting knob **No.21EZA105** (ISO/JIS/DIN Type), **No.21EZA150** (ASME/ANSI/AGD Type)
 - Lifting cable **No. 540774**
- SPC Cable:
 - No.905338** (1m)
 - No.905409** (2m)
- USB Input Tool Direct (2m) : **06ADV380F**
- Connecting Cables for **U-WAVE-T** (160mm):
 - No.02AZD790F**
 For footswitch: **02AZE140F**
 Refer to page F-60 for details.
- Digimatic Mini-Processor DP-1VR: **264-504**
- Contact points for Mitutoyo's dial indicators (Refer to pages F-51 to F-54 for details.)
 Interchangeable backs for 2 series (Refer to page F-55 for details.)
- Measuring stands (Refer to page F-79 to F-85 for details.)

IP53 dust/water protection level

Level 5: Dust protection

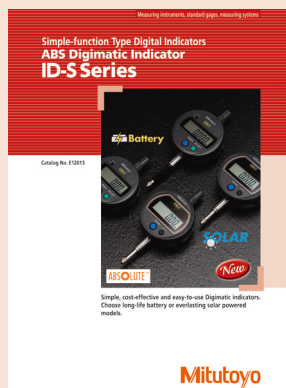
While complete protection against invasion of dust is not provided, protection is adequate to prevent dust amounts that would inhibit the prescribed operations and safety of the electronic equipment.

Level 3: Protection against spraying water

The product suffers no harmful effects when subjected to water sprayed at an angle of up to 60 degrees on both sides.

For details on the dust/water protection level test conditions, please refer to IEC 60529:2001 and JIS C 0920:2003.

IP code is the degree of protection against solid foreign objects and water.
 Mitutoyo offers a lineup of coolant proof, ID-N/B indicators that have excellent resistance to oil, water and dust and so are suitable for use in environments that include splashing cutting fluid.



Refer to the ABS Digimatic Indicator ID-S Series brochure (E12013) for details.

ABSOLUTE Digimatic Indicator ID-SX SERIES 543

- Cost-effective oriented design
 ID-SX indicators use a button-type battery (SR44) and come with the minimum of functionality for ease of use. There is a choice of models in the lineup allowing selection of 0.01 mm, 0.001 mm or inch-based measurement resolutions.
- IP53 dust/water protection level
 The models listed below also provide IP53 dust/water protection level specifications: **543-794/948/95/95B/96/96B**

- ABS (absolute) sensor
 These Digimatic indicators employ Mitutoyo's proprietary ABS (absolute) sensor, which makes it possible to restore the origin point even if the power is turned off. This eliminates the need to perform origin restoration each time the power is turned on. Furthermore, this sensor ensures that overspeed errors do not occur, which improves reliability.
- Long battery life
 One button battery (SR44) provides approximately 20,000 hours of continuous use for .0005"/0.01mm resolution models.



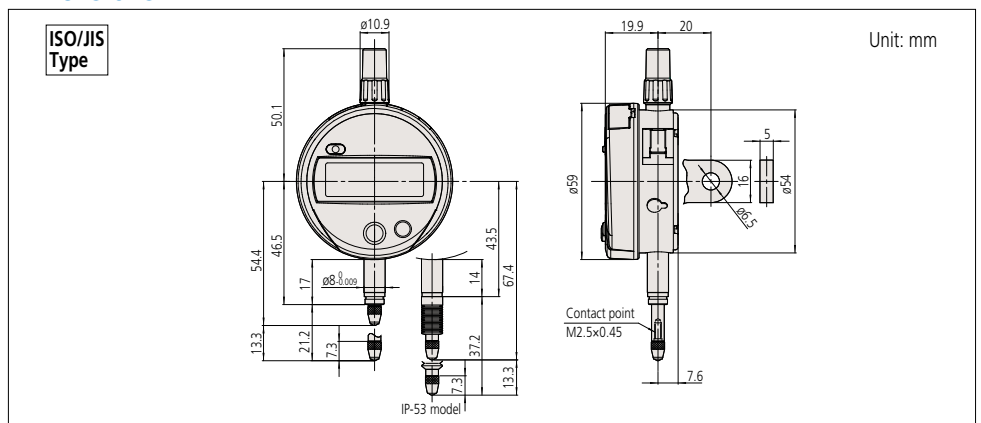
SPECIFICATIONS

Order No.	Range	Resolution	Accuracy*1			Back type	Measuring force	Battery life*3	Dust/Water protection level*4									
			Overall*2	Hysteresis	Repeatability													
543-790	12.7 mm	0.001 mm	0.003 mm	0.002 mm	0.002 mm	With lug	1.5N or less	18,000 hours	IP42									
543-790B						Flat												
543-794						With lug				2.5N or less	IP53							
543-794B						Flat												
543-781						0.01 mm						0.02 mm	0.02 mm	0.01 mm	With lug	1.5N or less	20,000 hours	IP42
543-781B															Flat			

Order No.	Range	Resolution	Accuracy*1			Back type	Measuring force	Battery life*3	Dust/Water protection level*4									
			Overall*2	Hysteresis	Repeatability													
543-791	5"/12.7 mm	.00005"/0.001mm	±.0001"/0.003mm	.0001"/0.002mm	.0001"/0.002mm	With lug	1.5N or less	18,000 hours	IP42									
543-791B						Flat												
543-792						With lug				2.5N or less	IP53							
543-792B						Flat												
543-793						.0001"/0.001mm						±.0001"/0.003mm	.0001"/0.002mm	.0001"/0.002mm	With lug	1.5N or less	20,000 hours	IP42
543-793B															Flat			
543-795	.00005"/0.001mm	.00005"/0.001mm	±.0010"/0.02mm	.0010"/0.02mm	.0005"/0.01mm	With lug	1.5N or less	20,000 hours	IP42									
543-795B						Flat												
543-796						With lug												
543-796B						Flat												
543-782						.0005"/0.01mm				±.0010"/0.02mm	.0010"/0.02mm	.0005"/0.01mm	With lug	1.5N or less	20,000 hours	IP42		
543-782B													Flat					
543-783	.0005"/0.01mm	±.0010"/0.02mm	.0010"/0.02mm	.0005"/0.01mm	With lug	1.5N or less	20,000 hours	IP42										
543-783B					Flat													

*1 These values apply at 20°C, and do not include ±1 count allowance for quantization error.
 *2 Overall magnification and linearity.
 *3 The battery life varies, depending on the number of times the Digimatic indicators are used as well as the way it is used. The values listed above are approximations.
 *4 This is only valid when the data socket cover is in place. Does not apply if the cover is removed, a lifting accessory is attached, or a connecting cable is attached.

Dimensions



Note 1: Dimensions of the inch (ANSI/AGD Type) dial indicator partly differ from those of the metric (ISO/JIS Type) indicator.
 Note 2: Inch (ANSI/AGD Type) dial indicators are provided with a stem of 3/8" dia. and #4-48UNF thread mount for the contact point.