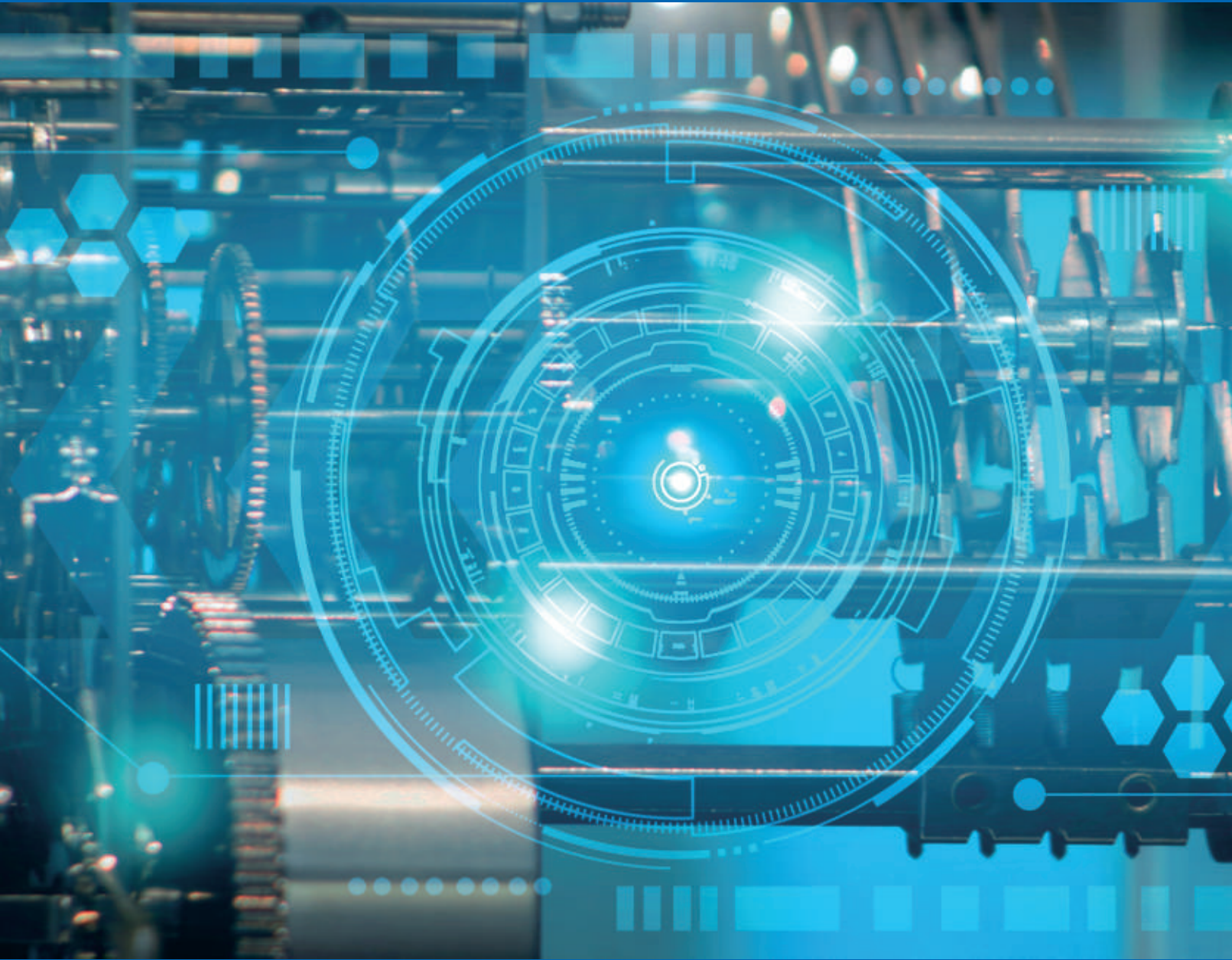


# Digital Readout&Linear Scale System

# DITRON®

*For Innovation and Accuracy*



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**DITRON**®

**成都鼎创光电设备有限公司**  
Chengdu Ditron Measuring Co.,Ltd

## 一、公司简介

Company Profile

Chengdu Ditron Measuring co.,Ltd ,located in Chengdu,Sichuan Province ,a professional manufacturer and exporter ,we are specialized in the research, development and production of Linear Scale,Magnetic Scale and Digital Readout.

In the past decades , we were committed to let our every customer enjoy the well manufactured products by focusing the products development, products quality -control and customers after-sales service.

Our professional R&D development is flexible with all kinds of demands .We are always standing with our customers to meet different requirements , while also offer solutions obtained by the sales department. We develop the latest & diversified products to suite our customers in different regionsWe are committed to update a group of new products every year.

Our management is strictly follow with ISO9001.And our annual production ability is around 50000pcs.We proceed 100% inspection of all the parts we are using.After the products being produced well,full aging testing and accuracy calibration by laser interferometer will be carried out. The strict QC system to ensure every product manufactured by Ditron meets the requirements of CE and ROHS standards.Besides offering the high quality products,we also stand behind our products.Full 1 year warranty period is available for every product from us.

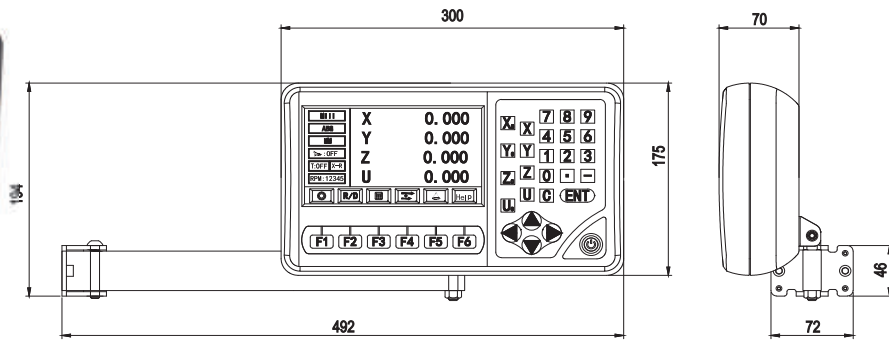
We stress on the spirit of contract and keep promises.Let us create the bright future.







# 数显表 (Digital Readout)



## D80

### 技术参数:

- 电压范围: AC80V-260V/50HZ-60HZ
- 功耗: 15W
- 工作温度: -10°C~60°C
- 坐标数: 2轴,3轴,4轴,5轴
- 操作面板: 机械按键
- 允许输入信号: 5V TTL 或 5V RS422
- 允许输入信号频率: ≤4MHZ
- 分辨率 (可设置): 0.1μm, 0.2μm, 0.5μm, 1μm, 2μm, 2.5μm, 5μm, 10μm, 50μm

### 特性:

- 7寸真彩屏
- 图纸储存功能, 系统针对每个特殊功能可以储存四套图纸, 使的重复加工更方便
- 图纸预览功能, 参数设置好后, 系统会显示加工效果图, 更直观体现加工后效果
- 刀具位置实时显示, 更好的展现加工效果
- 帮助功能, 能够帮助用户方便快捷的使用
- 快捷键自定义设置, 用户可以根据功能使用频率调整功能键位置

### 功能:

清零和清零恢复、置数、公英制转换、掉电记忆、传感器选择 (旋转或者线性)、线性补偿、非线性补偿计算器、计数方向设置、ABS/INC坐标系切换、200组SDM坐标、机械零位设置、分中、斜线分孔、圆周分孔、简易R功能、平滑R功能、半直径转换、轴加功能、数字防抖、锥度测量、RS232端口、火花机通断信号输出、斜面加工、矩形内腔加工、转速测量、基于旋转编码器线性测量、16组刀具库、动态加工显示、图纸预览

### Function:

Zeroing,Data Recovery,Value Inputting,Metric and Imperial Switching,Power off memory,Encoder Selection(Rotary or Linear),Linear Compensation,Non-linear Compensation,Calculator ,Counting Direction Setting,ABS/INC Coordinate,200 sets of SDM Coordinates,REF Centering,PLD Function,PCD Function ,Simple R function,Smooth R Function,Radius/Diameter switching,Axis summing,Digital Filtering Function,Taper Measuring Function , RS232 Interface,EDM Function,Bevel Function,Rectangle Chambering Function,Rotational Speed Measurement ,Linear Measuring Basing Rotary Encoder,16 sets of Tool Memory,Dynamic Graphics,Preview Drawing

### Technical Parameters:

- Voltage Range:AC80V-260V/50HZ-60HZ
- Power Dissipation:15W
- Working Temperature:-10°C~60°C
- Coordinate Display:2,3,4,5Axis
- Operating Keypad:Mechanical Keypad
- Input Signal:5V TTL/RS422
- Input Frequency:≤4MHZ
- Resolution:0.1μm, 0.2μm, 0.5μm, 1μm, 2μm, 2.5μm, 5μm, 10μm, 50μm

### Features:

- 7' true color LCD screen,easy to recognizing.
- Saving the drawing function,the DRO allows to save the drawings into the system which makes the machining to be much more convenient.
- Special previewing the drawing function,after setting well the parameters,the DRO will display the machined well effect which makes the operating be more visual.
- Displaying the tool' s current position function,during the machining,the system will display the tool' s current position according to the drawing which makes the machining be much more easier.
- Help function,during the machining,if there is any doubt,pressing the help button will help you to solve.
- Custom settings for the shortcut keys,operator can set the shortcut keys according to his operating habit.



## D80M

### 技术参数:

- 电压范围: AC80V-260V/50HZ-60HZ
- 功耗: 15W
- 工作温度: -10℃~60℃
- 坐标数: 2轴,3轴,4轴,5轴
- 操作面板: 机械按键
- 允许输入信号: 5V TTL 或 5V RS422
- 允许输入信号频率: ≤4MHZ
- 分辨率(可设置):  
0.1μm, 0.2μm, 0.5μm, 1μm, 2μm, 2.5μm, 5μm, 10μm, 50μm

### 特性:

- 数控磨床精磨过的全封闭金属外壳和7寸真彩屏
- 图纸储存功能, 系统针对每个特殊功能可以储存四套图纸, 使的重复加工更方便
- 图纸预览功能, 参数设置好后, 系统会显示加工效果图, 更直观体现加工后效果
- 刀具位置实时显示, 更好的展现加工效果
- 帮助功能, 能够帮助用户方便快捷的使用
- 快捷键自定义设置, 用户可以根据功能使用频率调整功能键位置
- 多语言功能, 为囊括了世界上大部分通用语言, 用户可以选择自己的母语进行操作

### 功能:

清零和清零恢复、置数、公英制转换、掉电记忆、传感器选择(旋转或者线性)、线性补偿、非线性补偿、计算器、计数方向设置、ABS/INC坐标系切换、200组SDM坐标、机械零位设置、分中、斜线分孔、圆周分孔、简易R功能、平滑R功能、半直径转换、轴加功能、数字防抖、锥度测量、RS232端口、火花机通断信号输出、斜面加工、矩形内腔加工、转速测量、基于旋转编码器线性测量、16组刀具库、动态加工显示、图纸预览

### Function:

Zeroing, Data Recovery, Value Inputting, Metric and Imperial Switching, Power off memory, Encoder Selection (Rotary or Linear), Linear Compensation, Non-linear Compensation, Calculator, Counting Direction Setting, ABS/INC Coordinate, 200 sets of SDM Coordinates, REF Centering, PLD Function, PCD Function, Simple R function, Smooth R Function, Radius/Diameter switching, Axis summing, Digital Filtering Function, Taper Measuring Function, RS232 Interface, EDM Function, Bevel Function, Rectangle Chambering Function, Rotational Speed Measurement, Linear Measuring Basing Rotary Encoder, 16 sets of Tool Memory, Dynamic Graphics, Preview Drawing



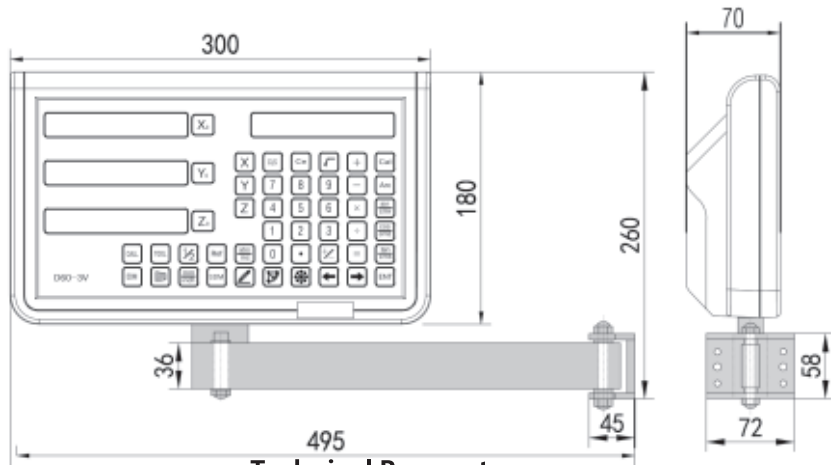
## (Built-in Type)

### Technical Parameters:

- Voltage Range: AC80V-260V/50HZ-60HZ
- Power Dissipation: 15W
- Working Temperature: -10℃~60℃
- Coordinate Display: 2,3,4,5 Axis
- Operating Keypad: Mechanical Keypad
- Input Signal: 5V TTL/RS422
- Input Frequency: ≤4MHZ
- Resolution: 0.1μm, 0.2μm, 0.5μm, 1μm, 2μm, 2.5μm, 5μm, 10μm, 50μm

### Features:

- CNC grinded metal shell and 7" true color LCD screen, easy to recognizing.
- Saving the drawing function, the DRO allows to save the drawings into the system which makes the machining to be much more convenient.
- Special previewing the drawing function, after setting well the parameters, the DRO will display the machined well effect which makes the operating be more visual.
- Displaying the tool's current position function, during the machining, the system will display the tool's current position according to the drawing which makes the machining be much more easier.
- Help function, during the machining, if there is any doubt, pressing the help button will help you to solve.
- Custom settings for the shortcut keys, operator can set the shortcut keys according to his operating habit.
- Multi-language: Insert most common languages in the world. Operator can choose their native language for operating.



## D60

### 技术参数:

- 电压范围: AC80V-260V/50HZ-60HZ
- 功耗: 15W
- 工作温度: -10°C~60°C
- 坐标数: 2轴或3轴
- 允许输入信号: 5V TTL 或 5V RS422
- 允许输入信号频率: ≤4MHZ
- 分辨率 (可设置):  
0.1μm, 0.2μm, 0.5μm, 1μm, 2μm, 2.5μm, 5μm, 10μm,

### 特性:

- 8位有效显示位
- 独特窗口覆膜技术, 显示更直观可见
- 全金属外壳, 工业级品质
- 高集成度, 数据处理及运行更稳定
- 领先工艺的芯片及电源, 开关机可达10万次
- 采用数字滤波技术, 使得计数更准确稳定

### 功能:

清零和清零恢复、置数、公英制转换、掉电记忆、传感器选择 (旋转或者线性)、线性补偿、非线性补偿、计算器、计数方向设置、ABS/INC坐标系切换、200组SDM坐标、机械零位设置、分中、斜线分孔、圆周分孔、简易R功能、平滑R功能、半直径转换、轴加功能、数字防抖、锥度测量 RS232端口、火花机通断信号输出、200组刀具库

### Function:

Zeroing, Data Recovery, Value Inputting, Metric and Imperial Switching, Power off memory, Encoder Selection (Rotary or Linear), Linear Compensation, Non-linear Compensation, Calculator, Counting Direction Setting, ABS/INC Coordinate, 200 sets of SDM Coordinates, REF Centering, PLD Function, PCD Function, Simple R function, Smooth R Function, Radius/Diameter switching, Axis summing, Digital Filtering Function, Taper Measuring Function, RS232 Interface, EDM Function, 200 sets of Tool Memory

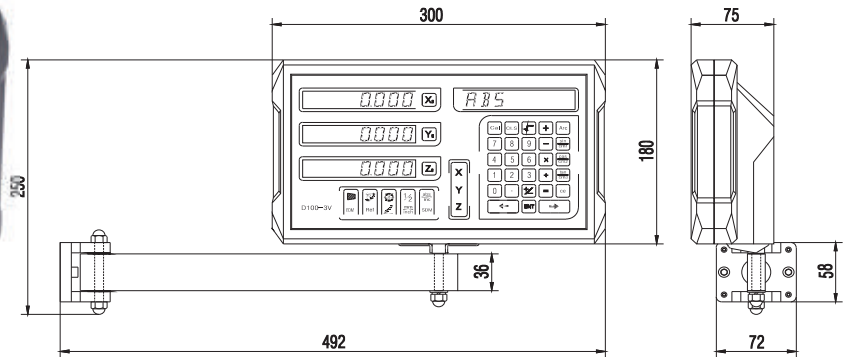
### Technical Parameters:

- Voltage Range: AC80V-260V/50HZ-60HZ
- Power Dissipation: 15W
- Working Temperature: -10°C~60°C
- Coordinate Display: 2 or 3 Axes
- Input Signal: 5V TTL/RS422
- Input Frequency: ≤4MHZ
- Resolution: 0.1μm, 0.2μm, 0.5μm, 1μm, 2μm, 2.5μm, 5μm, 10μm,

### Features:

- Displaying as 8 digits with green LED.
- Aluminum casing, industrial quality.
- Unique film makes covering on the Windows makes the displaying much more recognizable.
- High integration makes the performance be stable.
- Switching on & switching off can meet more than 100000 times.
- Adopting the advanced digital filtering makes the counting be more accurate and stable.





## D100

### 技术参数:

- 电压范围: AC80V-260V/50HZ-60HZ
- 功耗: 15W
- 工作温度: -10°C~60°C
- 坐标数: 2轴或3轴
- 允许输入信号: 5V TTL 或 5V RS422
- 允许输入信号频率: ≤4MHZ
- 分辨率 (可设置):  
0.1μm, 0.2μm, 0.5μm, 1μm, 2μm, 2.5μm,  
5μm, 10μm,

### 特性:

- 8位有效显示位
- 独特窗口覆膜技术, 显示更直观可见
- 高集成度, 数据处理及运行更稳定
- 领先工艺的芯片及电源, 开关机可达10万次
- 采用数字滤波技术, 使得计数更准确稳定

### 功能:

清零和清零恢复、置数、公英制转换、掉电记忆、传感器选择 (旋转或者线性)、线性补偿、非线性补偿计算器、计数方向设置、ABS/INC坐标系切换、200组SDM坐标、机械零位设置、分中、斜线分孔、圆周分孔、简易R功能、平滑R功能、半直径转换、轴加功能、数字防抖锥度测量、RS232端口、火花机通断信号输出

### Function:

Zeroing, Data Recovery, Value Inputting, Metric and Imperial Switching, Power off memory, Encoder Selection (Rotary or Linear), Linear Compensation, Non-linear Compensation, Calculator, Counting Direction Setting, ABS/INC Coordinate, 200 sets of SDM Coordinates, REF, Centering, PLD Function, PCD Function, Simple R function, Smooth R Function, Radius/Diameter switching, Axis summing, Digital Filtering Function, Taper Measuring Function, RS232 Interface, EDM Function

### Technical Parameters:

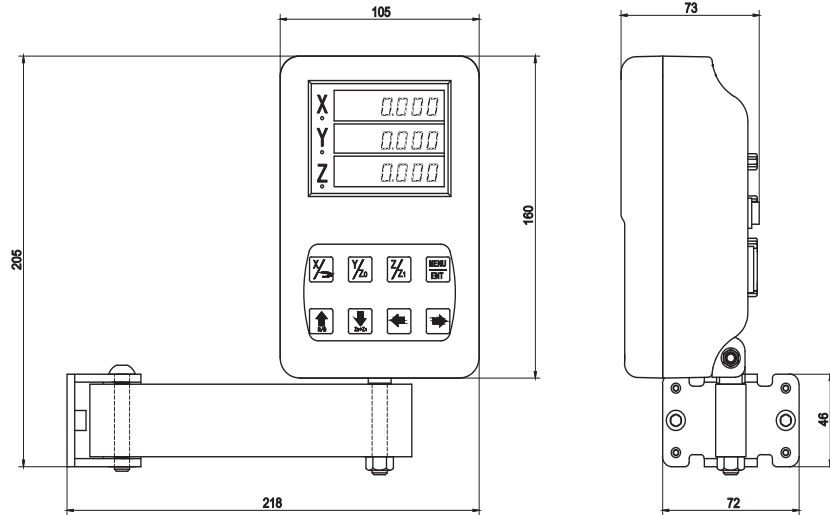
- Voltage Range: AC80V-260V/50HZ-60HZ
- Power Dissipation: 15W
- Working Temperature: -10°C~60°C
- Coordinate Display: 2 or 3 Axes
- Input Signal: 5V TTL/RS422
- Input Frequency: ≤4MHZ
- Resolution: 0.1μm, 0.2μm, 0.5μm, 1μm, 2μm, 2.5μm, 5μm, 10μm,

### Features:

- Displaying as 8 digits with green LED.
- Unique film makes covering on the Windows makes the displaying much more recognizable.
- High integration makes the performance be stable.
- Switching on & switching off can meet more than 100000 times.
- Adopting the advanced digital filtering makes the counting be more accurate and stable.



## DL50



### 技术参数:

- 电压范围: AC80V-260V/50HZ-60HZ
- 功耗: 5W
- 工作温度:  $-10^{\circ}\text{C}\sim 60^{\circ}\text{C}$
- 坐标数: 1轴,2轴,3轴
- 操作面板: 机械按键
- 允许输入信号: 5V TTL 或 5V RS422
- 允许输入信号频率:  $\leq 4\text{MHZ}$
- 分辨率 (可设置):  
0.1 $\mu\text{m}$ , 0.2 $\mu\text{m}$ , 0.5 $\mu\text{m}$ , 1 $\mu\text{m}$ , 2 $\mu\text{m}$ , 2.5 $\mu\text{m}$ , 5 $\mu\text{m}$ , 10 $\mu\text{m}$

### 特性:

- 8位有效显示位
- 可选配RS232通讯端口
- 高集成度, 数据处理快, 运行稳定
- 可接线性传感器或旋转编码器

### 功能:

清零和清零恢复、置数、公英制转换、掉电记忆、传感器选择 (旋转或者线性)、线性补偿、计数方向设置、分中、半直径转换、RS232端口

### Function:

Zeroing, Data Recovery, Value Inputting, Metric and Imperial Switching, Power off memory, Encoder Selection (Rotary or Linear), Linear Compensation, Counting Direction Setting, Centering, Radius/Diameter switching, RS232 Interface

### Technical Parameters:

- Voltage Range: AC80V-260V/50HZ-60HZ
- Power Dissipation: 5W
- Working Temperature:  $-10^{\circ}\text{C}\sim 60^{\circ}\text{C}$
- Coordinate Display: 1, 2, 3 Axes
- Operating Keypad: Mechanical Keypad
- Input Signal: 5V TTL/RS422
- Input Frequency:  $\leq 4\text{MHZ}$
- Resolution: 0.1 $\mu\text{m}$ , 0.2 $\mu\text{m}$ , 0.5 $\mu\text{m}$ , 1 $\mu\text{m}$ , 2 $\mu\text{m}$ , 2.5 $\mu\text{m}$ , 5 $\mu\text{m}$ , 10 $\mu\text{m}$

### Features:

- 1. Displaying as 8 digits with green LED
- Most economic option for small machines
- Optional for RS232 protocol
- High integration makes the performance be stable.



## D50

### 技术参数:

- 电压范围: AC80V-260V/50HZ-60HZ
- 功耗: 5W
- 工作温度: -10°C~60°C
- 坐标数: 1轴,2轴,3轴
- 操作面板: 机械按键
- 允许输入信号: 5V TTL 或 5V RS422
- 允许输入信号频率:  $\leq 4$ MHZ
- 分辨率 (可设置) : 0.1 $\mu$ m, 0.2 $\mu$ m, 0.5 $\mu$ m, 1 $\mu$ m, 2 $\mu$ m, 2.5 $\mu$ m, 5 $\mu$ m, 10 $\mu$ m

### 特性:

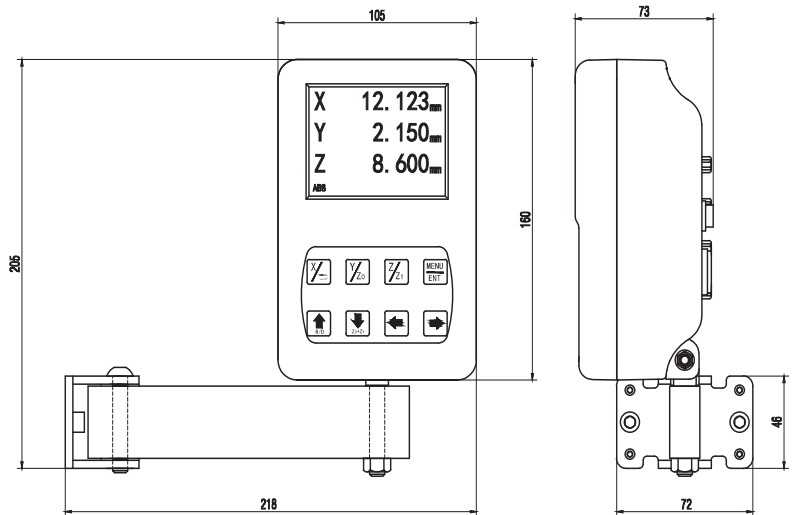
- 3.5寸真彩屏
- 可选配转速测量和RS232通讯端口
- 高集成度, 数据处理快, 运行稳定
- 车床模式下具有半直径转换功能, 铣床模式下有圆周分孔和斜线分孔功能, 非常适合小车床和小的转铣床
- 可接线性传感器或旋转编码器

### 功能:

清零和清零恢复、置数、公英制转换、掉电记忆、传感器选择(旋转或者线性)、线性补偿、计数方向设置、ABS/INC坐标系切换、200组SDM坐标、机械零位设置、分中、斜线分孔、圆周分孔半直径转换、轴加功能、数字防抖、RS232端口、转速测量、基于旋转编码器线性测量

### Function:

Zeroing, Data Recovery, Value Inputting, Metric and Imperial Switching, Power off memory, Encoder Selection (Rotary or Linear), Linear Compensation, Counting Direction Setting, ABS/INC Coordinate, 200 sets of SDM Coordinates, REF, Centering, PLD Function, PCD Function, Radius/Diameter switching, Axis summing, Digital Filtering Function, RS232 Interface, Rotational Speed Measurement, Linear Measuring Basing Rotary Encoder



### Technical Parameters:

- Voltage Range: AC80V-260V/50HZ-60HZ
- Power Dissipation: 5W
- Working Temperature: -10°C~60°C
- Coordinate Display: 1, 2, 3Axs
- Operating Keypad: Mechanical Keypad
- Input Signal: 5V TTL/RS422
- Input Frequency:  $\leq 4$ MHZ
- Resolution: 0.1 $\mu$ m, 0.2 $\mu$ m, 0.5 $\mu$ m, 1 $\mu$ m, 2 $\mu$ m, 5 $\mu$ m, 10 $\mu$ m

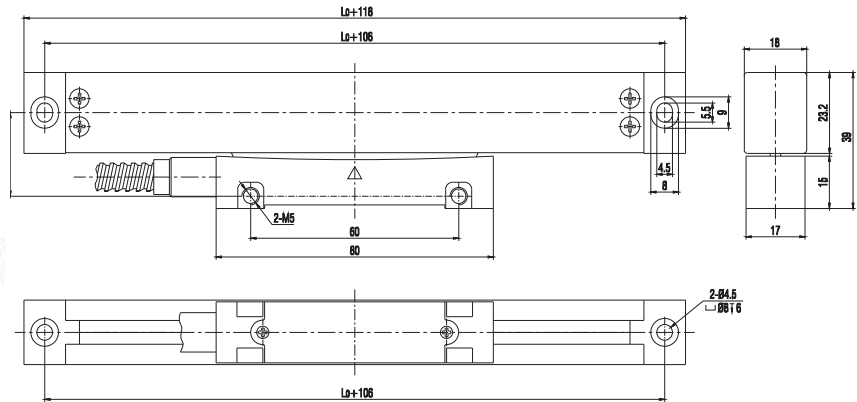
### Features:

- 3.5" true color LCD screen, easy to recognizing.
- Optional for RPM function and RS232 protocol
- High integration makes the performance be stable.
- Lathe mode with Z+Z1 and Diameter&Radius conversion, Milling mode with PLD and PCD function
- Smart checking of the inner data and power supply
- Can connect with both linear scale and rotary encoder





# 光栅尺(Linear Scale)



## DC10F

### 技术参数:

- 量程: 50-600mm
- 分辨率: 0.5 $\mu$ m, 1 $\mu$ m, 5 $\mu$ m, 10 $\mu$ m
- 输出信号: 5V TTL,5V RS42
- 截面尺寸: 18\*23mm
- 精度:  $\pm 5\mu$ m、 $\pm 10\mu$ m/M
- 密封等级: IP55
- 最快位移速度: 60M/Min
- 零位点: 每50mm一个

### Technical Parameters:

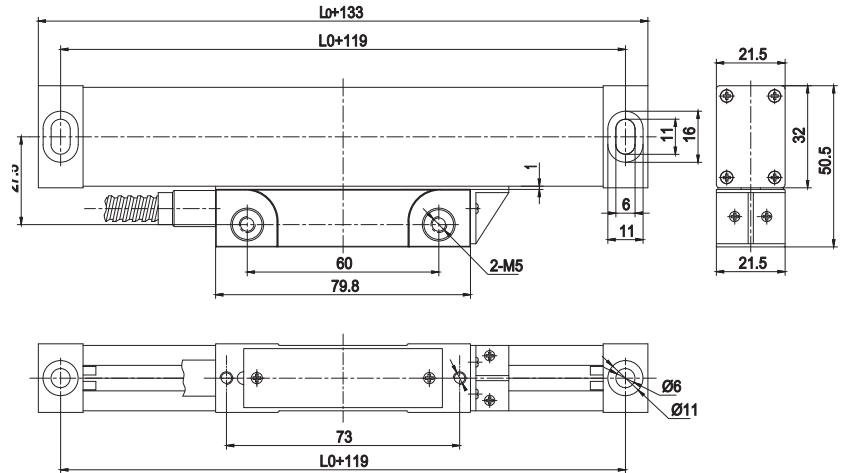
- Measuring Length:50-600mm
- Resolution:0.5 $\mu$ m, 1 $\mu$ m, 5 $\mu$ m, 10 $\mu$ m
- Output Signal:5V TTL,5V RS422
- Cross Section:18\*23mm
- Accuracy: $\pm 5\mu$ ,  $\pm 10\mu$ m/M
- Sealing Protection:IP55
- Max. Moving Speed:60M/Min
- Reference Point:Every 50mm

### 特性:

- 垂直5轴承滑动系统, 保障滑行顺畅和精度
- 相较于一般光栅尺, 尺身更小, 非常适合安装空间受限的应用
- 雷尼绍激光干涉仪检测, 保障精度
- 全封闭式结构, 避免灰层、切屑和冷却液进入

### Features:

- Vertical five bearings sliding system,smooth and accurate movement
- Narrow size,ideal for small machines
- Calibrated by Laser interferometer,accuracy guaranteed
- Full sealing structure,swarf and coolant proof



## DC10

### 技术参数:

- 量程: 50-1100mm
- 分辨率: 0.1 $\mu$ m, 0.5 $\mu$ m, 1 $\mu$ m, 5 $\mu$ m, 10 $\mu$ m
- 输出信号: 5V TTL, 5V RS422
- 截面尺寸: 20.5\*31mm
- 精度:  $\pm$ 5 $\mu$ m、 $\pm$ 10 $\mu$ m/M
- 工作温度: -10 $^{\circ}$ C-60 $^{\circ}$ C
- 密封等级: IP55
- 最快位移速度: 60M/Min
- 零位点: 每50mm一个

### 特性:

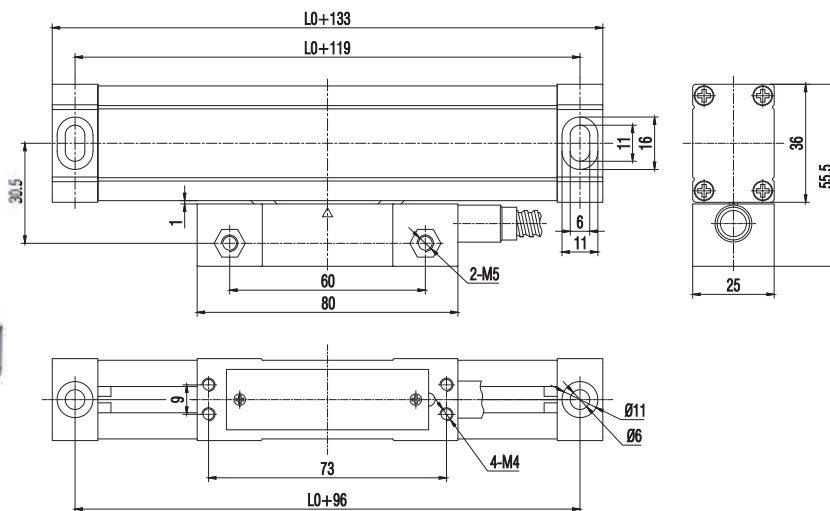
- 垂直5轴承滑动系统, 保障滑行顺畅和精度
- 雷尼绍激光干涉仪检测, 保障精度
- 全封闭式结构, 避免灰层、切屑和冷却液进入

### Technical Parameters:

- Measuring Length: 50-1100mm
- Resolution: 0.1 $\mu$ m, 0.5 $\mu$ m, 1 $\mu$ m, 5 $\mu$ m, 10 $\mu$ m
- Output Signal: 5V TTL, 5V RS422
- Cross Section: 20.5\*31mm
- Accuracy:  $\pm$ 5 $\mu$ ,  $\pm$ 10 $\mu$ m/M
- Working Temperature: -10 $^{\circ}$ C-60 $^{\circ}$ C
- Sealing Protection: IP55
- Max. Moving Speed: 60M/Min
- Reference Point: Every 50mm

### Features:

- Vertical five bearings sliding system, smooth and accurate movement
- Calibrated by Laser interferometer, accuracy guaranteed
- Full sealing structure, swarf and coolant proof



## DC30

### 技术参数:

- 量程: 50-1200mm
- 分辨率: 0.1 $\mu$ m, 0.5 $\mu$ m, 1 $\mu$ m, 5 $\mu$ m, 10 $\mu$ m
- 输出信号: 5V TTL, 5V RS422
- 截面尺寸: 24\*35mm
- 精度:  $\pm$ 5 $\mu$ m、 $\pm$ 10 $\mu$ m/M
- 工作温度: -10 $^{\circ}$ C-60 $^{\circ}$ C
- 密封等级: IP55
- 最快位移速度: 60M/Min
- 零位点: 每50mm一个

### 特性:

- 45度5轴承滑动系统, 保障滑行顺畅和精度
- 雷尼绍激光干涉仪检测, 保障精度
- 全封闭式结构, 避免灰层、切屑和冷却液进入

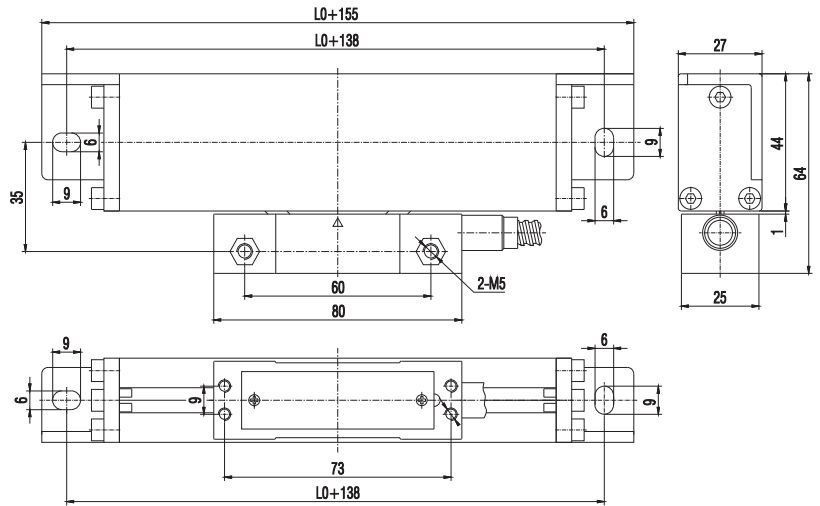
### Technical Parameters:

- Measuring Length: 50-1200mm
- Resolution: 0.1 $\mu$ m, 0.5 $\mu$ m, 1 $\mu$ m, 5 $\mu$ m, 10 $\mu$ m
- Output Signal: 5V TTL, 5V RS422
- Cross Section: 24\*35mm
- Accuracy:  $\pm$ 3 $\mu$ m,  $\pm$ 5 $\mu$ m,  $\pm$ 10 $\mu$ m/M
- Working Temperature: -10 $^{\circ}$ C-60 $^{\circ}$ C
- Sealing Protection: IP55
- Max. Moving Speed: 60M/Min
- Reference Point: Every 50mm

### Features:

- 45 $^{\circ}$  five bearings sliding system, smooth and accurate movement
- Calibrated by Laser interferometer, accuracy guaranteed
- Full sealing structure, swarf and coolant proof





## DC20

### 技术参数:

- 量程: 50-3000mm
- 分辨率: 0.1 $\mu$ m, 0.5 $\mu$ m, 1 $\mu$ m, 5 $\mu$ m, 10 $\mu$ m
- 输出信号: 5V TTL, 5V RS422
- 截面尺寸: 27\*44mm
- 精度:  $\pm$ 5 $\mu$ m、 $\pm$ 10 $\mu$ m/M
- 工作温度: -10 $^{\circ}$ C-60 $^{\circ}$ C
- 密封等级: IP55
- 最快位移速度: 60M/Min
- 零位点: 每50mm一个

### 特性:

- 45度5轴承滑动系统, 保障滑行顺畅和精度
- 大型尺, 适合于长行程的设备
- 雷尼绍激光干涉仪检测, 保障精度
- 全封闭式结构, 避免灰尘、切屑和冷却液进入

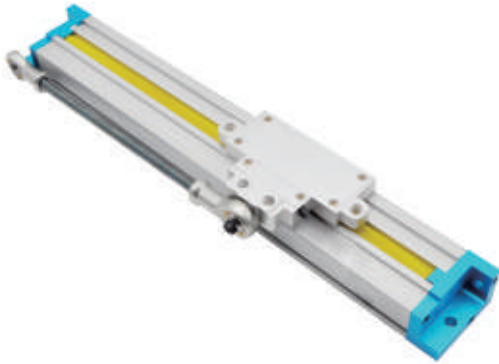
### Technical Parameters:

- Measuring Length: 50-3000mm
- Resolution: 0.1 $\mu$ m, 0.5 $\mu$ m, 1 $\mu$ m, 5 $\mu$ m, 10 $\mu$ m
- Output Signal: 5V TTL, 5V RS422
- Cross Section: 27\*44mm
- Accuracy:  $\pm$ 3 $\mu$ m,  $\pm$ 5 $\mu$ m,  $\pm$ 10 $\mu$ m/M
- Working Temperature: -10 $^{\circ}$ C-60 $^{\circ}$ C
- Sealing Protection: IP55
- Max. Moving Speed: 60M/Min
- Reference Point: Every 50mm

### Features:

- 45 $^{\circ}$  five bearings sliding system, smooth and accurate movement
- Heavy duty, very robust, ideal for large machines
- Calibrated by Laser interferometer, accuracy guaranteed
- Full sealing structure, swarf and coolant proof





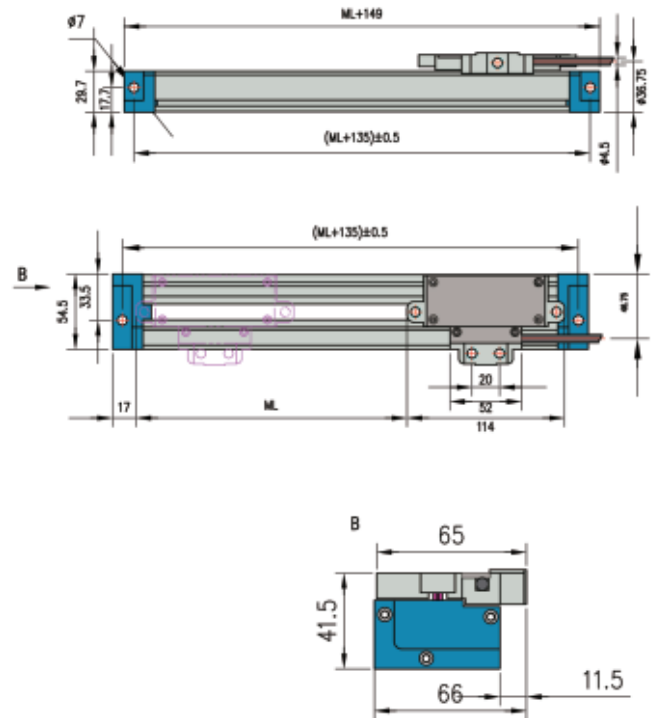
## DG417

### 技术参数:

- 量程: 50-600mm
- 分辨率: 5 $\mu$ m
- 输出信号: 5V RS422
- 精度:  $\pm 10\mu\text{m}/\text{M}$
- 工作温度:  $-10^{\circ}\text{C}-60^{\circ}\text{C}$
- 密封等级: IP54
- 最快位移速度: 120M/Min
- 零位点: 一个,位于起始端 $28\pm 1$ 毫米处

### 特性:

- 采用内部直线导轨,使内部运动结构稳定、可靠
- 高运动速度,每分钟可达120米
- 高集成处理电路,性能稳定
- 稳定的机械结构,在高震动频率时对信号提供有效的保护



### Technical Parameters:

- Measuring Length: 50-600mm
- Resolution: 5 $\mu\text{m}$
- Output Signal: 5V RS422
- Accuracy:  $\pm 10\mu\text{m}/\text{M}$
- Working Temperature:  $-10^{\circ}\text{C}-60^{\circ}\text{C}$
- Sealing Protection: IP54
- Max. Moving Speed: 120M/Min
- Reference Point:  $28\pm 1$ mm from the beginning end

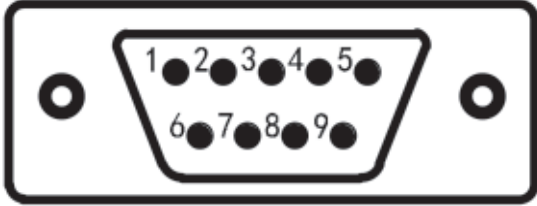
### Features:

- Adopting linear guideway inside makes the movement very smooth and stable.
- High speed for movement, up to 120M/Min
- High circuit integration makes the performance be stable.
- Advanced mechanical structure, good performance for signal protection under vibration.

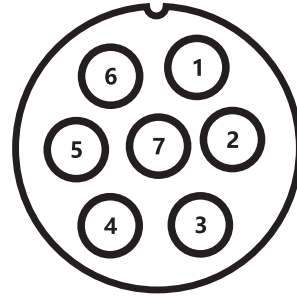




## 接线定义



(DB9 Connector)



(Din7 Connector)

### Linear Scale Signal Wiring Diagram

DB9 插头接线方式 -- TTL

Nine-Pin TTL output signal

Pin	1	2	3	4	5	6	7	8	9
Signal	Empty	0V	Empty	Shield	empty	A	+5V	B	R
Color		Black		Shielding		Yellow	Red	Green	Brown

DB9 插头接线方式 --RS422

Nine-Pin RS422 output signal

Pin	1	2	3	4	5	6	7	8	9
Signal	A-	0V	B-	Shield	R-	A	+5V	B	R
Color	Orange	Black	Blue	Shielding	White	Yellow	Red	Green	Brown

DIN7接线方式--TTL

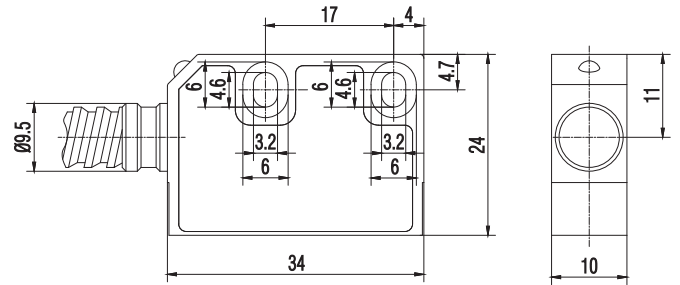
Seven-Pin TTL output signal

Pin	1	2	3	4	5	6	7
Signal	0V	Empty	A	B	+5V	R	Shield
Color	Black		Yellow	Green	Red	Brown	Shielding

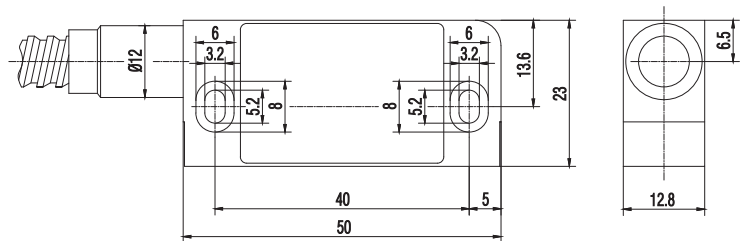
## 磁栅尺 (Magnetic Scale)



**(DMR500)**



**(DMR5000)**



### 技术参数:

- 电压: 4.7V至7.5V (反接和过压保护范围: -20V-+20V)
- 电源电流: < 35mA
- 线压降: 4.8mV/m-空载 ~12.5mV/m-120Ω
- 信号输出: RS422差分信号,TTL单方波信号
- 信号等级: UH≥2.5V at-IH=20mA  
UL≤0.5V at IL=20mA
- 温度: -10°C-+80°C (工作) -40°C-+85°C (储存)
- 分辨率: 10μm, 5μm, 1μm
- 精度: ±0.02mm/M 一个当量 (重复定位精度)
- 最大线缆长度: 100米

### 特性:

- IP67防护等级
- 自动增益技术, 磁头和磁带间隙最大可达3mm
- 高响应频率, 当分辨率为5微米时, 速度最高可达150米每分钟
- 双色LED指示灯 (绿色和红色), 可提供错误报警, 降低安装难度

### Technical Parameters:

- Voltage:4.7V to 7.5V(The range of anti-pole and over-voltage protection:-20V-+20V)
- Supply current: < 35mA
- Cable Voltage-drop:~4.8mV/m-without load  
~12.5mV/m-with 120Ω load
- Output signal:RS422,TTL
- Signal Level:UH≥2.5V at-IH=20mA  
UL≤0.5V at IL=20mA
- Temperature: working:-10°C-+80°C  
Storage: -40°C-+85°C
- Resolution:0.01mm,0.005mm,0.001mm
- Accuracy:±0.02mm/M
- Repeat Accuracy:1 pulse
- Maximum cable length:200M

### Features:

- Rated to IP67 protection class.
- Automatic gain control technics,reduced the requirement for installation.The gap between the reader and tape can be 3mm.
- Protection of the anti-pole of the power and wrong wire connection(voltage < 5.5V).
- High Speed,can reach 150 Meters/Minute for the resolution of 5 micron.
- Clear indication LED light(Red&Green),easy for installation and adjustment.



Stainless steel cover tape:A=0.1mm

Adhesive tape:K=0.13mm

Magnetic tape:M=1mm

Spring steel carrier tape:T=0.3mm

Adhesive tape:K=0.13mm

Total thickness:1.66mm

## MS500

### 技术参数:

磁间距: 2/5mm

最大长度: 50M

膨胀系数:  $(11 \pm 1) \times 10^{-6}/K$

温度: -20 °C to +85°C(使用) -40 °C to +100 °C(储存)

宽度: 10mm±0.2mm

### Technical Parameters:

Pole Pitch:2/5mm

Maximum length:50M

Expansion Coefficient: $(11 \pm 1) \times 10^{-6}/K$

Temperature Range:-20 °C to +85°C(Operation)  
-40 °C to +100 °C(Storage)

Width:10mm±0.2mm

### 特性:

便捷的背胶(3M)粘贴方式安装

整体最长可达50M

### Features:

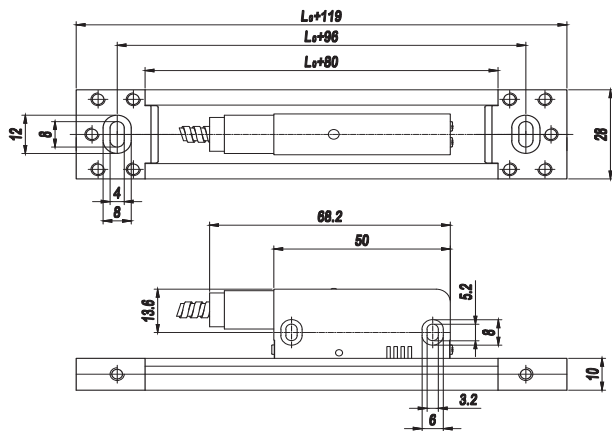
Convenient adhesive installation.

The entire roll length can reach 50m.

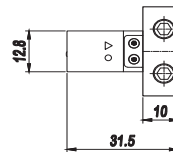
Accuracy up to 20µm .



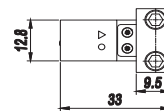
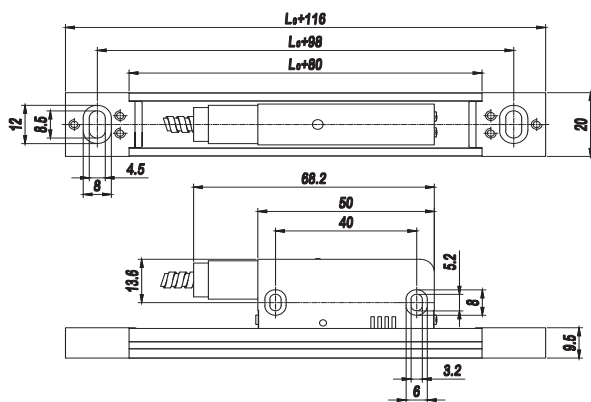
## DMA



## DMS



(DMA)

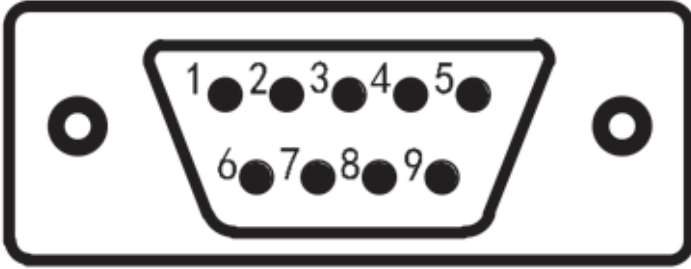


(DMS)





## 接线定义



### Magnetic Scale Signal Wiring Diagram

DB9 插头接线方式 -- TTL

Nine-Pin TTL output signal

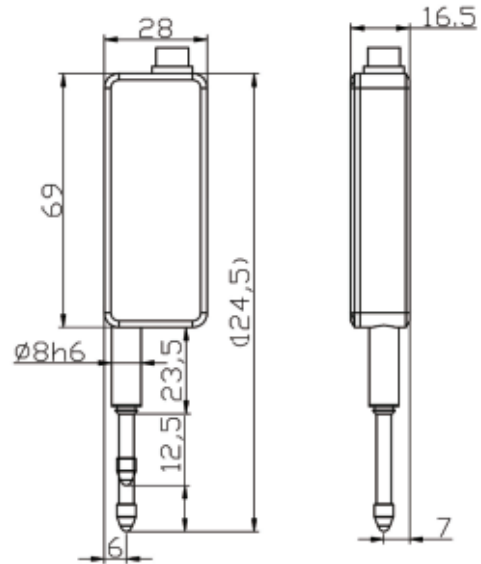
Pin	1	2	3	4	5	6	7	8	9
Signal	Empty	0V	Empty	Shield	empty	A	+5V	B	R
Color		Black		Shielding		Yellow	Red	Green	Brown

DB9 插头接线方式 --RS422

Nine-Pin RS422 output signal

Pin	1	2	3	4	5	6	7	8	9
Signal	A-	0V	B-	Shield	R-	A	+5V	B	R
Color	Orange	Black	Blue	Shielding	White	Yellow	Red	Green	Brown

## 测微仪 (Measuring Probe)



### D30

#### 技术参数:

量程: 0-12.5mm,0-25.4mm  
分辨率: 0.0005mm/0.0002mm  
精度:  $\leq 0.003\text{mm}$   
重复定位精度:  $\leq 0.001\text{mm}$   
测力:  $\leq 1.5\text{N}$   
输出: RS232

#### 特性:

绝对式测量, 无累计误差  
长使用寿命, 大千万级次

#### Technical Parameters:

Measuring Range:0-12.5mm,0-25.4mm  
Resolution:0.0005mm/0.0002mm  
Accuracy: $\leq 0.003\text{mm}$   
Repeated Accuracy: $\leq 0.001\text{mm}$   
Measuring Force: $\leq 1.5\text{N}$   
Output signal:RS232

#### Features:

Absolute glass measuring,no accumulated err.  
Long working life,ten million usage level

# DITRON®

## **Chengdu Ditron Measuring Co.,Ltd**

Address:No.88,Wuke Road(W-1),Chengdu,Sichuan,China

Tel:+86-85737891

Web:[www.dcoee.com](http://www.dcoee.com)

E-mail:[info@dcoee.com](mailto:info@dcoee.com)

Dealer Stamp