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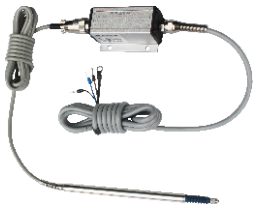
中国工信部高精度传感器一条龙应用计划示范项目

国家级专精特新“小巨人”企业，国家级高新技术企业

中国工业强基重点产品，中国工信部传感器一条龙应用计划示范企业

LVDT位移传感器

LVDT DISPLACEMENT SENSOR



LVDT8直出线
LVDT8 straight out



LVDT8侧出线
LVDT8 side outlet



LVDT8Q气动式
LVDT8Q pneumatic



LVDT20回弹分体式
LVDT20 rebound split



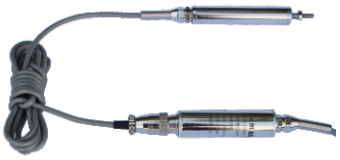
LVDT20回弹一体式
LVDT20 rebound one-piece



LVDTC20拉杆一体式
LVDTC20 tie rod one piece



LVDTFS防水回弹式
LVDTFS waterproof rebound



LVDTCFS防水拉杆式
LVDTCFS waterproof trolley



LVDTC36阀芯位移式
LVDTC36 spool displacement

LVDT差动变压器式位移传感器

LVDT differential transformer type displacement sensor

- Demonstration project of one-stop application plan for high-precision sensors of Ministry of Industry and Information Technology of China
- National level specialized and special new "little giant" enterprise, national level high-tech enterprise
- Key products of strong industrial base in China, demonstration enterprise of sensor one-stop application plan of Ministry of Industry and Information Technology of China

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电气连接Electrical Connection

电流二线制接线方式 Current 2-wire wiring (12-24V DC)	棕色 BROWN	蓝色 BLUE	屏蔽线 SHIELDED WIRE		
	供电电源 (+) power supply (+)	电流输出 current output	GND		

电压三线制接线方式 Voltage 3-wire wiring (12-24V DC)	棕色 BROWN	蓝色 BLUE	黑色 BLACK 白色 WHITE	屏蔽线 SHIELDED WIRE	
	供电电源 (+) power supply (+)	电压输出 (+) voltage output (+)	供电电源 (-) power supply (-) 电压输出 (-) voltage output (-)	GND	

RS485接线方式 RS485 wiring method (12-24V DC)	棕色 BROWN	黑色 BLACK	蓝色 BLUE	白色 WHITE	屏蔽线 SHIELDED WIRE
	供电电源 (+) power supply (+)	供电电源 (-) power supply (-)	RS485 A	RS485 B	GND

四线制接线方式 4-wire wiring method (9-36V DC)	红色 RED	黑色 BLACK	绿色 GREEN	白色 WHITE	屏蔽线 SHIELDED WIRE
	供电电源 (+) power supply (+)	供电电源 (-) power supply (-)	信号输出+ signal output +	信号输出- signal output -	GND

以上仅为参考，具体接线定义以产品实物标签上的标注为准。

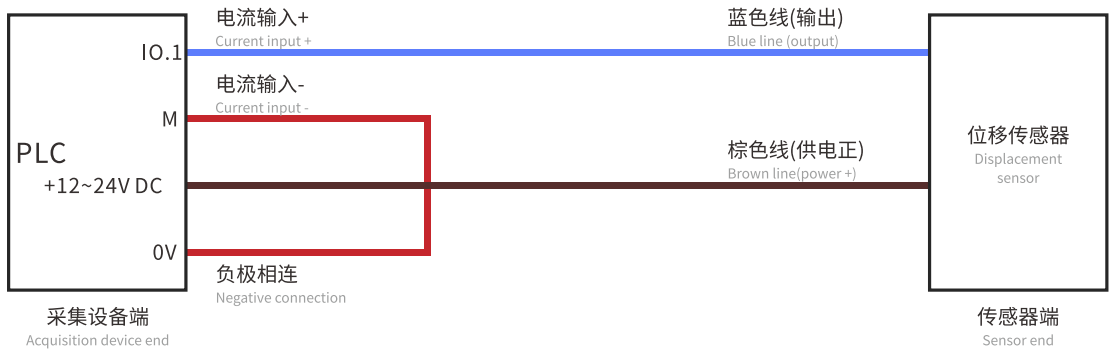
The above is for reference only, the specific wiring definition of the product physical labeling shall prevail.

注：模拟量输出选择四线制电子仓时，供电范围为9-36V，但是数字量输出时，无论选择什么电子仓，供电电压范围始终为12-24V。

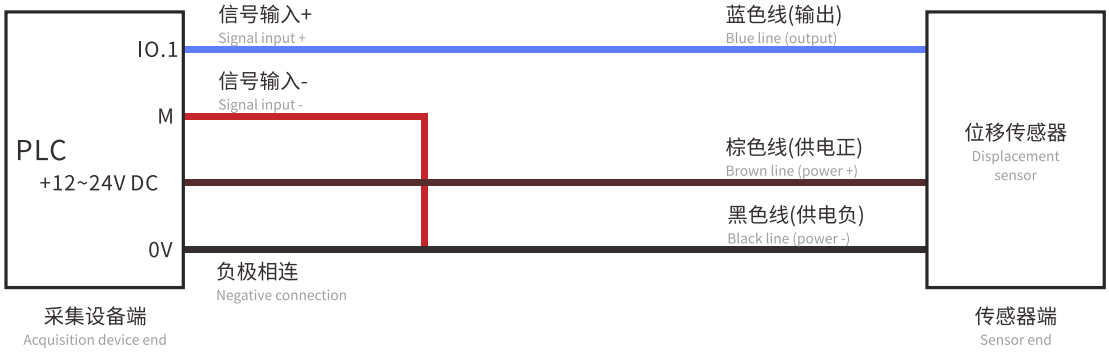
Note: When the analog output is set to a four-wire electronic compartment, the power supply range is 9-36V. However, for digital output, regardless of the chosen electronic compartment, the power supply voltage range is always 12-24V.

接线示意图Wiring Schematic

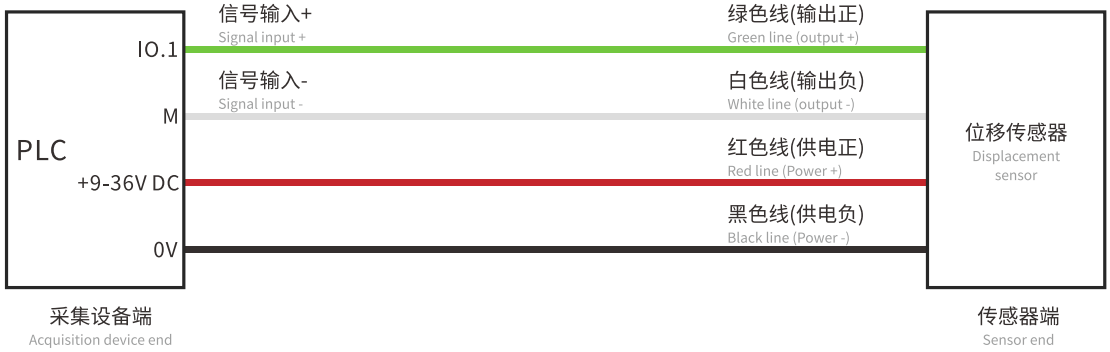
二线制输出PLC接入型接线图
2-wire output PLC access wiring diagram



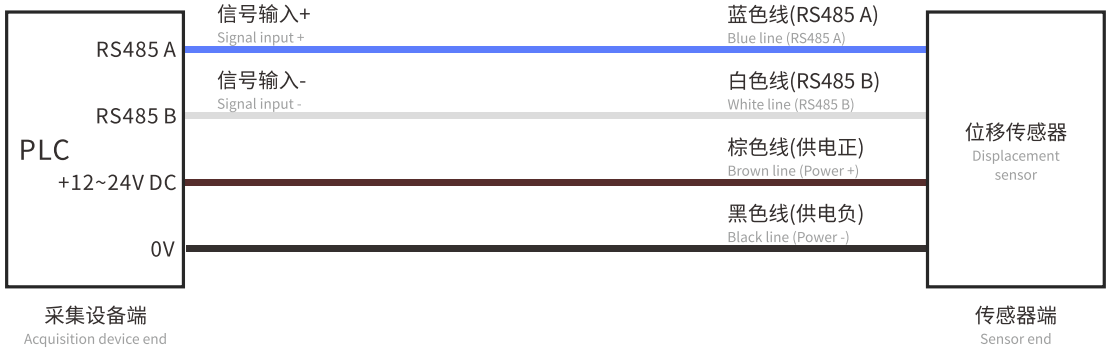
三线制输出PLC接入型接线图
3-wire output PLC access wiring diagram



四线制输出PLC接入型接线图
4-wire output PLC access wiring diagram



RS485输出PLC接入型接线图
RS485 output PLC access wiring diagram



备注:以上仅为参考,具体接线定义以产品实物标签上的标注为准,直流稳压电源输出电压值必须在规定的使用范围内。

Note: The above is for reference only, the specific wiring definition is subject to the label on the product physical label, the output voltage value of DC regulated power supply must be within the specified range of use.

可选测头Optional Probes

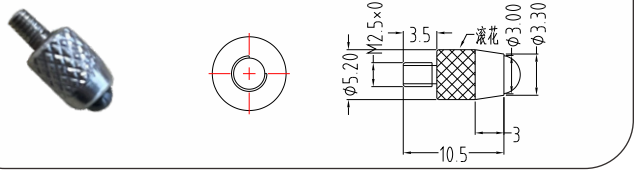
LVDT回弹式可选测头LVDT springback optional probes

测头螺纹尺寸M2.5*0.45，默认标准为氮化硅陶瓷球头，可更换以下测头：

Probe thread size M2.5*0.45, the default standard is silicon nitride ceramic ball head, can be replaced by the following probes:

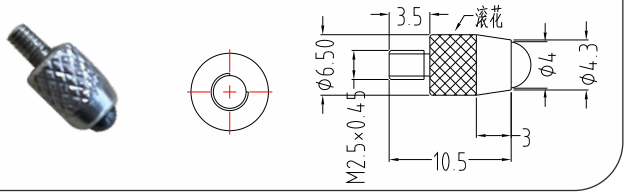
LVDT8默认标准测头（氮化硅陶瓷球头）

LVDT8 default standard probe (silicon nitride ceramic ball)



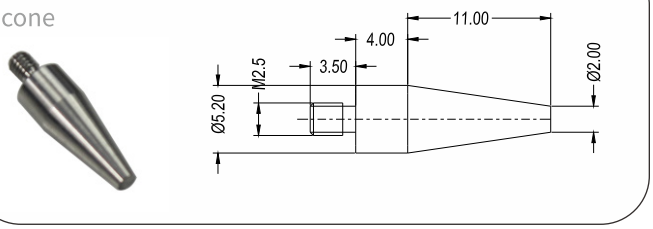
LVDT20默认标准测头（氮化硅陶瓷球头）

LVDT20 default standard probe (silicon nitride ceramic ball tip)



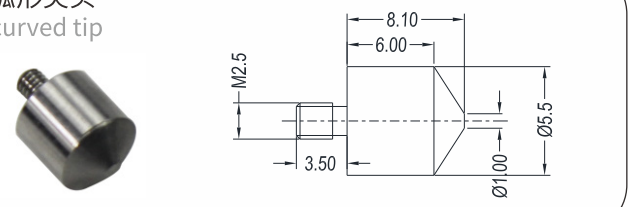
锥头

cone



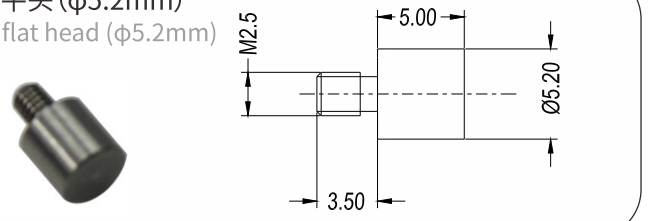
弧形尖头

curved tip



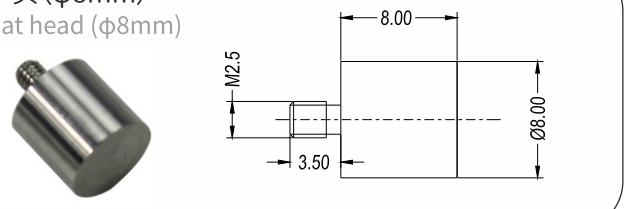
平头（φ5.2mm）

flat head (φ5.2mm)



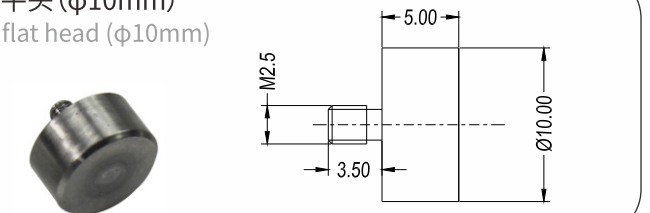
平头（φ8mm）

flat head (φ8mm)



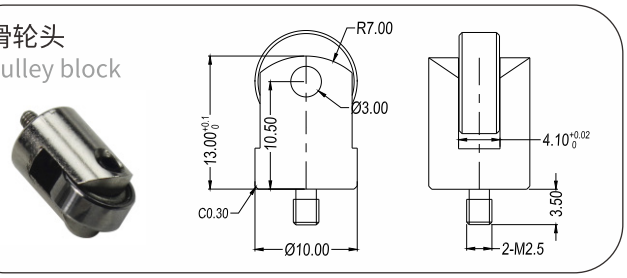
平头（φ10mm）

flat head (φ10mm)



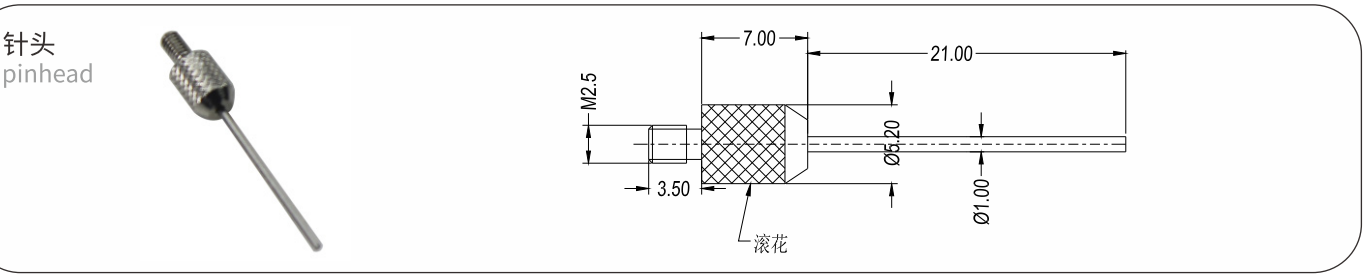
滑轮头

pulley block



针头

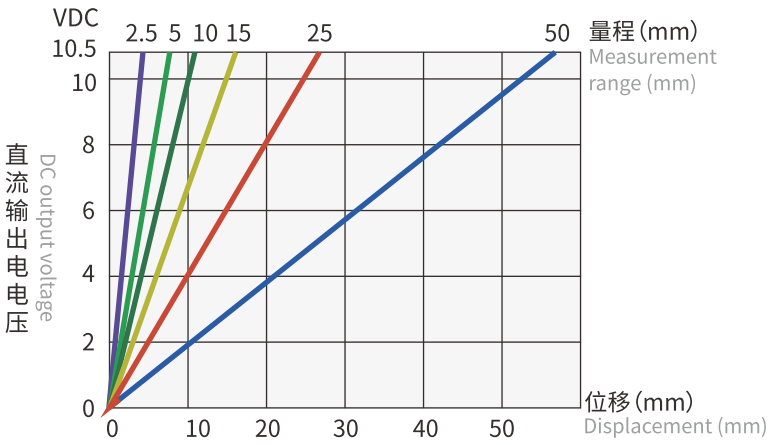
pinhead



输出特性Output Characteristics

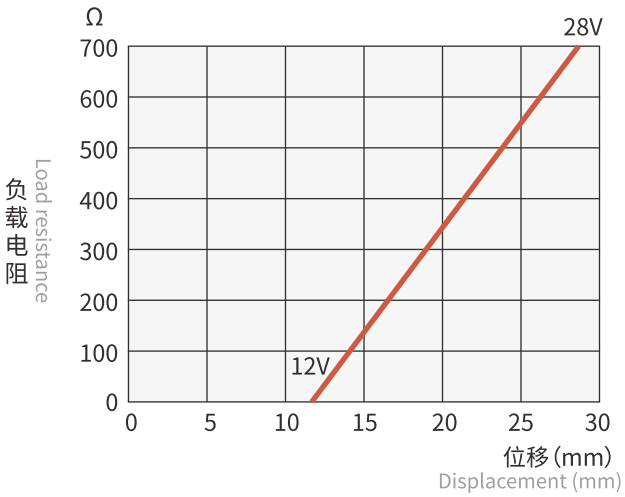
电压输出型LVDT
voltage output LVDT

不同量程0-10V输出电压和位移关系
relationship between output voltage and displacement for different ranges 0-10V
(供电电压15~28VDC，推荐供电电压15VDC)
(supply voltage 15~28VDC, recommended supply voltage 15VDC)

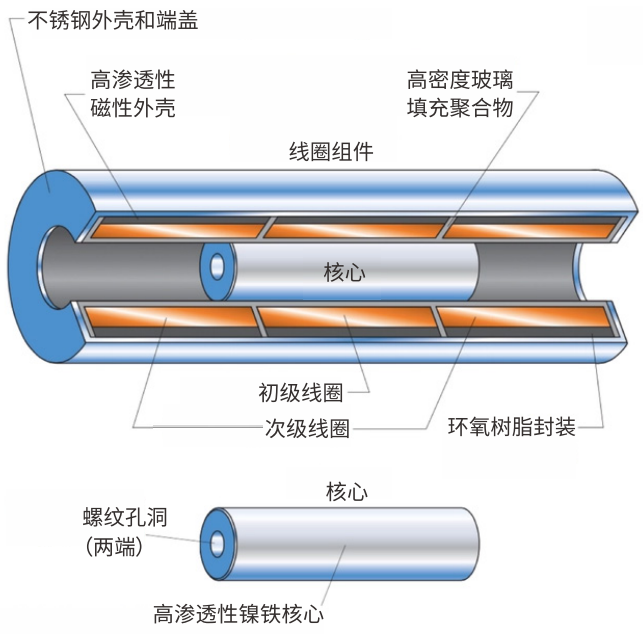


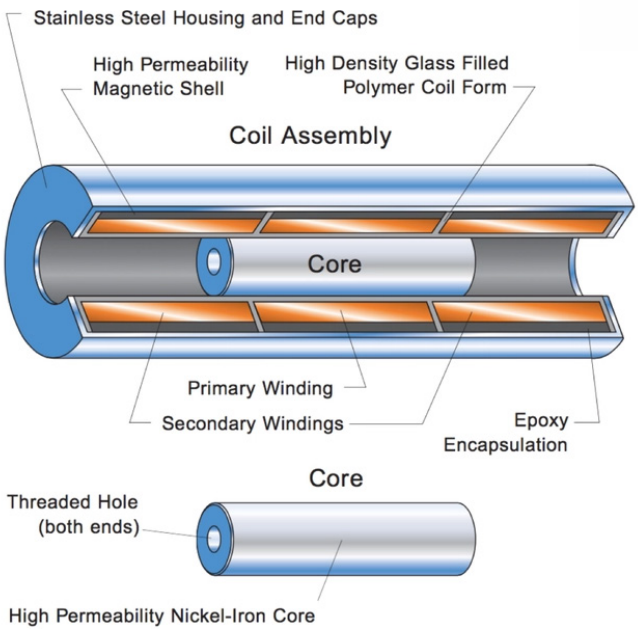
电流输出型LVDT
current output LVDT

最大环路负载电阻和供电电压关系
maximum loop load resistance and supply voltage relationships
(供电电压15~28VDC，推荐供电电压24VDC，负载电阻500Ω)
(supply voltage 15~28VDC, recommended supply voltage 24VDC, load resistance 500Ω)



工作原理示意图Working Principle Schematic





工作原理Working Principle

LVDT位移传感器的工作原理简单地说是铁芯可动变压器，它由一个初级线圈，两个次级线圈，铁芯，线圈骨架，外壳等部件组成。初级线圈、次级线圈分布在线圈骨架上，线圈内部有一个可自由移动的杆状铁芯。当铁芯处于中间位置时，两个次级线圈产生的感应电动势相等，这样输出电压为零；当铁芯在线圈内部移动并偏离中心位置时，两个线圈产生的感应电动势不等，有电压输出，其电压大小取决于位移量的大小。

为了提高传感器的灵敏度，改善传感器的线性度、增大传感器的线性范围，设计时将两个线圈反串相接、两个次级线圈的电压极性相反，LVDT输出的电压是两个次级线圈的电压之差，这个输出的电压值与铁芯的位移量成线性关系。LVDT工作过程中，铁芯的运动不能超出线圈的线性范围，否则将产生非线性值，因此所有的LVDT均有一个线性范围。

The working principle of LVDT displacement sensor is simply an iron core movable transformer, which consists of a primary coil, two secondary coils, iron core, coil skeleton, housing and other components. The primary and secondary coils are distributed on the coil skeleton, and inside the coil there is a freely movable. The coil has a freely movable rod-shaped iron core inside. When the core is in the middle position, the two secondary coils produce equal induced electromotive force, so that the output voltage is zero; when the core moves inside the coil and deviates from the center position, the two coils produce unequal induced electromotive force, and there is voltage output, and the size of its voltage depends on the size of the displacement.

In order to increase the sensitivity of the sensor, improve the linearity of the sensor, increase the linear range of the sensor, the design of the two coils connected in reverse series, the two secondary coils of the reverse polarity of the voltage, the LVDT output voltage is the difference between the two secondary coils of the voltage, the output of the voltage value and the core of the displacement of the linear relationship between the core of the LVDT process, the core's movement can not be outside the linear range of coils, otherwise it will produce a non-linear value, so all LVDT have a linear range. Otherwise, non-linear values will be generated, so all LVDT have a linear range.

LVDT8笔式位移传感器
LVDT8 Pen Displacement Sensor

产品实物图Product Picture

LVDT8笔式直出线A型电子仓
LVDT8 pen type straight out wire A type electronic warehouse





LVDT8笔式侧出线A型电子仓
LVDT8 pen type side outlet A electronic bin

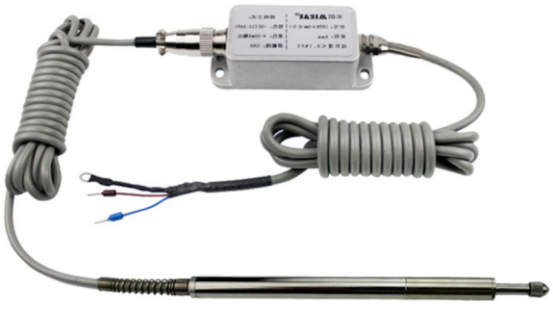




LVDT8笔式直出线B型电子仓
LVDT8 pen type straight out wire B type electronic warehouse



新款B型电子仓（默认）
new type B electronic silo (default)



旧款B型电子仓（可选）
old type B electronic silo (optional)

LVDT8直出线四线制电子仓
LVDT8 direct wire four-wire electronic bin

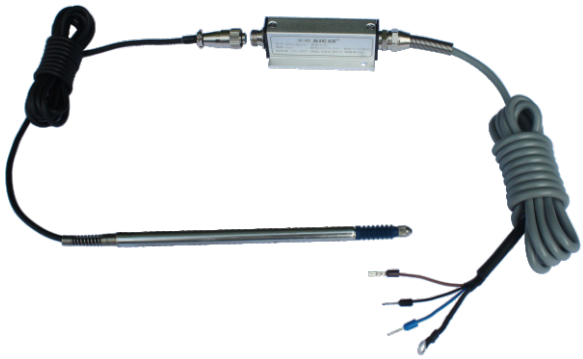


C型四线制电子仓
C-type 4-wire electronic warehouse



D型四线制电子仓
D-type 4-wire electronic warehouse

LVDT8笔式直出线E型电子仓
LVDT8 pen type straight out wire E-type electronic bin





LVDT8笔式直出线K型电子仓
LVDT8 pen type straight out line K-type electronic warehouse





产品型号选型Product Model Selection

LVDT □ - □ - □□ - □□ - □ - □ - □

8：笔式系列
8: pen series

A：4-20mA输出
A: 4-20mA output

V1：0-5V输出
V1: 0-5V output

V2：0-10V输出
V2:0-10V output

V3：±5V输出（四线制）
V3: ±5V output(4-wire)

V4：±10V输出（四线制）
V4: ±10V output(4-wire)

R：RS485输出
R: RS485 output

X：可选量程（mm）：
X: selectable ranges (mm):
2.5、5、10

DL：测笔尾部直出线
DL: stylus tail straight out

SL：测笔尾部侧出线
SL: stylus tail side exit line

DZ：特殊定制型
DZ: special customized type

1：表示精度≤0.1%FS
（适用于量程2.5、5mm）
1: indication accuracy ≤0.1%FS
(for range 2.5, 5mm)

2：表示精度≤0.15%FS
（适用于量程10mm）
2: indication accuracy ≤0.15%FS
(for range 10mm)

3：表示精度≤0.25%FS
3: indication accuracy ≤0.25%FS

4：表示精度≤1%FS
4: indication accuracy≤1%FS

P：加强屏蔽系列（可选）
P: reinforced shielding series (optional)



A型分体式电子仓
Type A split electronic silo



B型分体式电子仓
Type B split electronic silo



C型分体式电子仓
Type C split electronic silo



D型分体式电子仓
Type D split electronic silo



E型分体式电子仓
Type E split electronic silo



K型分体式电子仓
Type K split electronic silo

A：电子仓是直径20mm（模拟量）/22mm（数字量）的圆管
A: the electronic silo is a cylindrical tube with a diameter of 20mm (analog) / 22mm (digital)

B：电子仓是长方块（默认新款，旧款可选）
B: the electronics bin is a rectangle (default new model,old model optional)

C：电子仓是卧式长方形L80*W62*H32mm（四线制专用电子仓）
C: electronic compartment is horizontal rectangle L80*W62*H32mm (4-wire special electronic compartment)

D：电子仓是卧式长方形L80*W48*H46mm（四线制专用电子仓）
D: electronic compartment is horizontal rectangle L80*W48*H46mm (4-wire special electronic compartment)

E：电子仓是长方形L73*W27*H24mm
E: electronic compartment is rectangular L73*W27*H24mm

K：电子仓是导轨卡扣式L73*W19*H28mm
K: electronic compartment is rail snap type L73*W19*H28mm

例如：LVDT8-A-2.5mm-DL-A-1 表示LVDT8笔式系列，4-20mA信号输出，量程2.5mm，测笔尾部直出线，A型分体式电子仓，精度≤0.1%FS。

For example: LVDT8-A-2.5mm-DL-A-1 indicates the LVDT8 pen series, 4-20mA signal output, range 2.5mm, stylus tail straight out of the line, A-type split electronic compartment, accuracy ≤ 0.1% FS.

注意事项Caveat

1、LVDT8只做带防尘套的；LVDT8-P加强屏蔽系列默认测笔带防尘套管，LVDT8-P加强屏蔽系列不带防尘套管下单时需备注。

1、LVDT8 only do with a dust jacket; LVDT8-P enhanced shielding series default stylus with a dust jacket tube, LVDT8-P enhanced shielding series without a dust jacket tube need to be noted when ordering.

2、带防尘套的测笔，更能适应有粉尘的环境。不带防尘套的测笔长度更短。可根据客户现场环境，选择是否需要防尘套。

2、Styli with dust caps are better suited to dusty environments. Styli without dust caps are shorter. The need for a dust cover can be selected according to the customer's site environment.

3、LVDT8-P加强屏蔽系列是在带防尘套管的LVDT8测笔基础上加强屏蔽功能。LVDT8-P加强屏蔽系列外形尺寸与LVDT8外形尺寸相同，但工艺和材料略有不同。

3、 LVDT8-P enhanced shielding series is based on the LVDT8 stylus with a dust sleeve to enhance the shielding function. LVDT8-P enhanced shielding series external dimensions and LVDT8 external dimensions are the same, but the process and materials are slightly different.

4、LVDT8系列如需要矩阵安装，每只测笔之间的安装最小间距不小于40mm；若需要更小安装间距，请选择LVDT8-P加强屏蔽系列，LVDT8-P加强屏蔽系列矩阵安装时，每只测笔之间的安装最小间距为5-10mm。

4、LVDT8 series such as the need for matrix installation, the installation of the minimum distance between each stylus is not less than 40mm; if you need a smaller installation distance, please select the LVDT8-P enhanced shielding series, LVDT8-P enhanced shielding series of matrix installation, the installation of the minimum distance between each stylus is 5-10mm.

5、带防尘套管的外形尺寸会比不带防尘套管的外形尺寸略长，具体详见尺寸图。

5、The external dimensions of the tube with dust cover will be slightly longer than the external dimensions of the tube without dust cover, please refer to the dimension drawing for details.

6、测量前请务必先排除死区（可定制无死区）。

6、Please be sure to remove the dead zone before measurement (can be customized without dead zone).

7、A型电子仓模拟量输出直径20mm，数字量输出直径22mm；旧款B型电子仓，E型电子尺和K型电子仓仅可做模拟量信号输出；新款B型电子仓，C型电子仓和D型电子仓可做模拟量信号输出或数字量信号输出。

7、Diameter of analog output of A sub-compartment is 20mm, diameter of digital output is 22mm; old B sub-compartment, E sub-compartment and K sub-compartment can only be used for analog signal output; new B sub-compartment, C sub-compartment and D sub-compartment can be used for analog signal output or digital signal output.

8、4-20mA电流输出默认为二线制，可选四线制；0-5V和0-10V电压输出默认为三线制，可选4线制；±5V和±10V电压信号输出只能做四线制（以上信号输出选择四线制时下单需备注且只能选择C型分体式电子仓或者D型分体式电子仓）。

8、4-20mA current output is 2-wire by default, 4-wire optional; 0-5V and 0-10V voltage output is 3-wire by default, 4-wire optional; ±5V and ±10V voltage signal output can only be done in 4-wire system (When choosing 4-wire system for the above signal output, you need to make a note when placing an order and you can only choose the C-type split sub-electronic sub-store or the D-type split sub-electronic sub-store).

9、传感器测笔和变送器必须配套（测笔编号与变送器编号一致）使用，禁止随意调换，否则传感器线性精度将严重失真。

9、The sensor stylus and transmitter must be used as a matched set (stylus number and transmitter number are the same) and must not be switched, or the sensor linearity accuracy will be severely distorted.

10、回弹式的LVDT传感器默认未压缩数值最小，压缩到底数值最大；拉杆式的LVDT传感器默认没拉出数值最大，完全拉出数值最小。如需改变输出大小方向，请提前告知！

10、The default value of the rebound LVDT sensor is the smallest uncompressed value, and the value of the fully compressed value is the largest; the default value of the lever-type LVDT sensor is the smallest value when it is not pulled out, and the value of the fully pulled out value is the smallest. If you need to change the output size, please inform us in advance!

产品概述Product Overview

LVDT8笔式位移传感器具有优良的性能，适用于质量控制和计量应用中的高精度，高重复性的测量。测头采用高硬度的耐磨材料氮化硅陶瓷，测轴移动部分采用精密导轨。笔形位移传感器外配变送器可输出标准的直流信号，采用方便的单电源+12～+30V DC供电，电子电路密封在304不锈钢金属管内,可以在潮湿和灰尘等恶劣环境中工作。输出信号为标准的可被计算机或PLC使用的0-5V，0-10V，4-20mA或RS485输出。LVDT8笔式位移传感器特点为外径Φ8mm笔形回弹式位移传感器，探头为氮化硅陶瓷球，耐磨性好，测量范围由0-10MM，分辨率高，重复性好，无滑动触点，使用寿命长，交流信号电源供电，外配高性能信号解调器，二线制4-20mA电流输出，三线制0-5V或0-10V电压输出，四线制RS485数字信号输出。

带防尘套的LVDT8测笔，能适应有粉尘的环境。如需要矩阵安装，每只测笔安装距离不小于40mm，若需要更小安装间距需要额外定制屏蔽功能，选择LVDT8-P笔式加强屏蔽系列。

带防尘套的LVDT8-P加强屏蔽系列测笔，能适应有粉尘的环境。而不带防尘套的LVDT8-P加强屏蔽系列测笔长度更短。可根据客户现场环境，选择是否需要防尘套。LVDT8-P加强屏蔽系列测笔添加了屏蔽功能，解决了测笔与测笔之间的相互干扰问题。更适合矩阵安装场景，测笔的安装最小间距为 5-10mm，测笔的易损件铁芯和弹簧可以方便更换。若需要更小安装间距需要额外定制屏蔽功能。

The LVDT8 pen displacement transducer offers excellent performance for highly accurate and repeatable measurements in quality control and metrology applications. The probe head is made from a high hardness wear resistant material, silicon nitride ceramic, and the moving part of the measuring axis uses precision guides. The pen displacement sensors are equipped with an external transmitter that outputs a standard DC signal and is powered by a convenient single +12 to +30V DC power supply. The electronic circuitry is sealed in a 304 stainless steel metal tube, which allows it to work in harsh environments such as humidity and dust. The output signals are standard 0-5V, 0-10V, 4-20mA or RS485 outputs that can be used by computers or PLC's. The LVDT8 Pen Displacement Sensor is characterized by a pen-shaped rebound displacement sensor with an outer diameter of Φ8mm.LVDT8 pen displacement sensor is characterized by Φ8mm pen-shaped rebound displacement sensor, the probe is silicon nitride ceramic ball, good abrasion resistance, measuring range from 0-10MM, high resolution, good repeatability, no sliding contacts, long service life, AC signal power supply, external high-performance signal demodulator, 2-wire 4-20mA current output, 3-wire 0-5V or 0-10V voltage output, 4-wire RS485 digital signal output.

The LVDT8 stylus with dust cover is suitable for dusty environments. For matrix mounting, each stylus can be mounted at a distance of no less than 40mm, and for tighter spacing with additional customized shielding, choose the LVDT8-P pen enhanced shielding range.

The LVDT8-P Enhanced Shielded Series stylus with a dust cap is designed to withstand dusty environments. The LVDT8-P Enhanced Shielded stylus without a dust cap is shorter. The LVDT8-P Enhanced Shielded stylus has

an added shielding feature that solves the problem of stylus-to-stylus contact. Solves the problem of stylus-to-stylus interference. Better suited to matrix installation scenarios, the stylus can be mounted with a minimum spacing of 5-10mm, and the wear parts of the stylus, the core and spring, can be easily replaced. If smaller spacing is required, additional customized shielding is required.

性能参数Performance Parameters

电气指标Electrical Indicators

型号 Model number	LVDT8笔式位移传感器 LVDT8 Pen Displacement Transducer		
工作电流 Operating current	电压输出型 电流＜10mA/＜50mA voltage output type current <10mA/ <50mA		
	二线制4-20mA电流输出型 电流4~25mA 2-wire 4-20mA current output type current 4~25mA		
	RS485输出型 电流15~40mA RS485 output type current 15~40mA		
输出信号 Output signal	0~5V，0~10V，4~20mA，RS485		
分辨率 Resolution	≤0.1um(最高)，数字式输出是16bit ≤0.1um (max.), digital output is 16bit		
线性误差 Linearity error	≤0.1%FS：量程2.5、5mm；≤0.15%FS：量程10mm ≤0.1%FS: range 2.5, 5mm; ≤0.15%FS: range 10mm		
位移量程 Displacement range	2.5mm，5mm，10mm		
供电电源 Power supply	+12~+30V DC	重复误差 Repeatability	最高可达1um up to 1um

重复误差：量程越小重复误差越小。

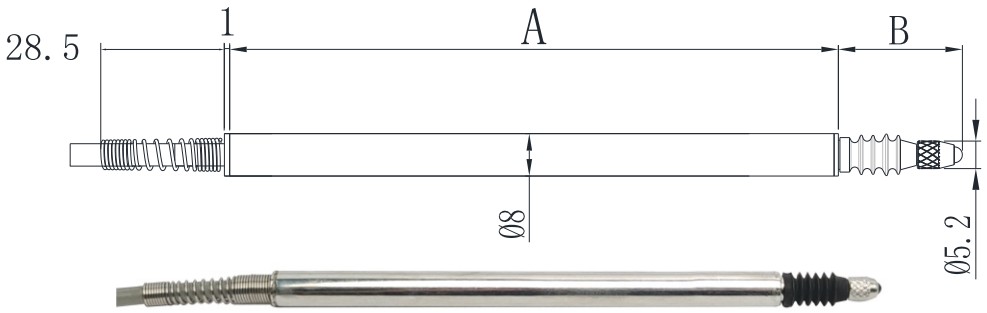
Repeat error: the smaller the range, the lower the repeat error.

性能指标Performance Indicators

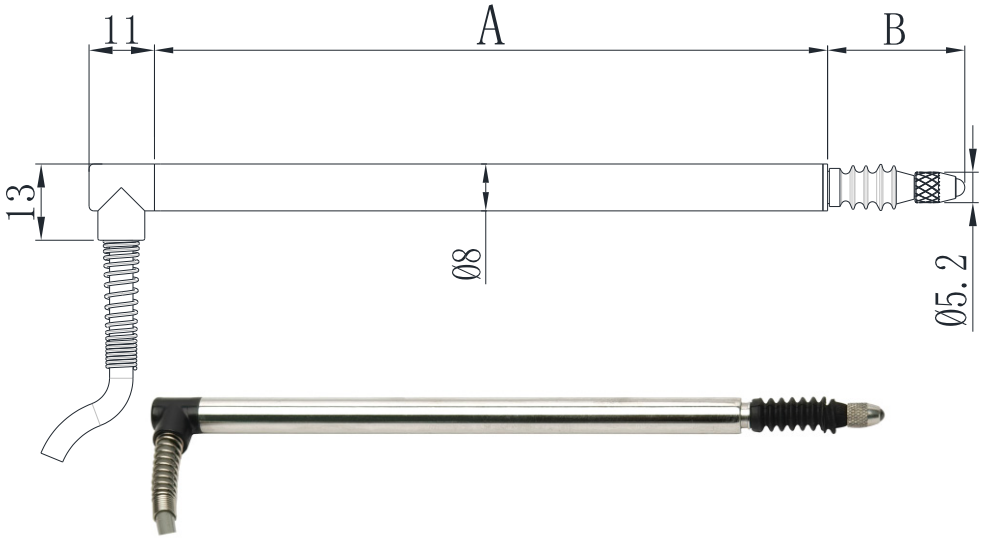
动态特性 Dynamic property	80HZ	激励电压 Excitation voltage	3Vrms
振动允限 Vibration tolerance	10g/2KHZ	灵敏度 Sensitivity	≤0.025%/℃
工作温度 Operating temperature	-25℃~+85℃	激励频率 Excitation frequency	5KHZ
耐受冲击 Impact resistance	250g/11毫秒 250g/11 ms	温度系数 Temperature coefficient	零点≤0.01%/℃ zero ≤ 0.01%/℃

产品尺寸图Product Dimension Drawing

LVDT8/LVDT8-P测笔直出线(带防尘套)
LVDT8/LVDT8-P test pen straight out (with dust jacket)



LVDT8/LVDT8-P测笔侧出线(带防尘套)
LVDT8/LVDT8-P stylus side exit cable (with dust jacket)



量程 range	长度A length A	长度B length B	前后死区 front and rear dead zones	测量力值 measured force value
2.5mm	105mm	23mm	0.5mm	0.3~0.8N
5mm	115mm	23mm	1mm	0.3~0.9N
10mm	121mm	30mm	1mm	0.8~3.7N

注意事项Caveats：

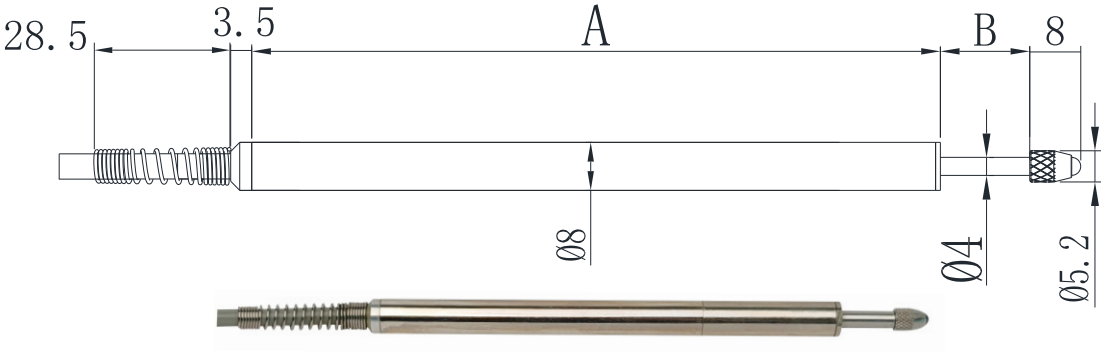
1.测量前请务必先排除死区（可定制无死区）。
1. Please make sure to eliminate the dead zone before measurement (can be customized without dead zone).

2.笔式位移传感器（LVDT）外径是8mm，自身内部不带电路解调器(即变送器)。外配变送器通过航空插头方式连接。
2. Pen-type displacement transducer (LVDT) the outer diameter is 8mm, and there is no internal circuit demodulator (i.e. transmitter). The external transmitter is connected by means of an aviation plug.

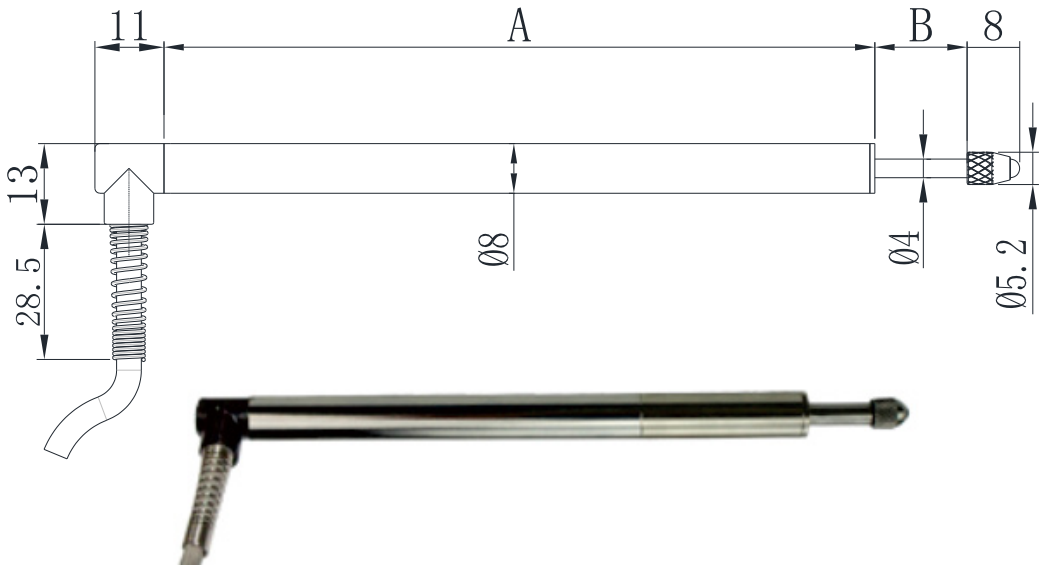
3.LVDT8测笔自身没有屏蔽功能，带防尘套，测笔矩阵安装时两测笔的最小安装间距40mm。
3. LVDT8 stylus with no shielding on its own, with dust cover and a minimum mounting distance of 40 mm between two styli when mounted in the stylus matrix.

4.若需要更小安装间距需要额外定制屏蔽功能，选择LVDT8P笔式加强屏蔽系列，测笔矩阵安装时两测笔的最小安装间距5-10mm。
4. If a smaller mounting distance is required and additional customized shielding is required, select the LVDT8P pen-enhanced shielding series, with a minimum mounting distance of 5-10mm between the two styli when installed in the stylus matrix.

LVDT8-P测笔直出线(不带防尘套)
LVDT8-P test pen straight out (without dust jacket)



LVDT8-P测笔侧出线(不带防尘套)
LVDT8-P stylus side exit cable (without dust jacket)



量程 range	长度A length A	长度B length B	前后死区 front and rear dead zones	测量力值 measured force value
2.5mm	96mm	4.5mm	1mm	1~1.6N
5mm	96mm	7mm	1mm	1~1.8N
10mm	102mm	12mm	1mm	0.7~2N

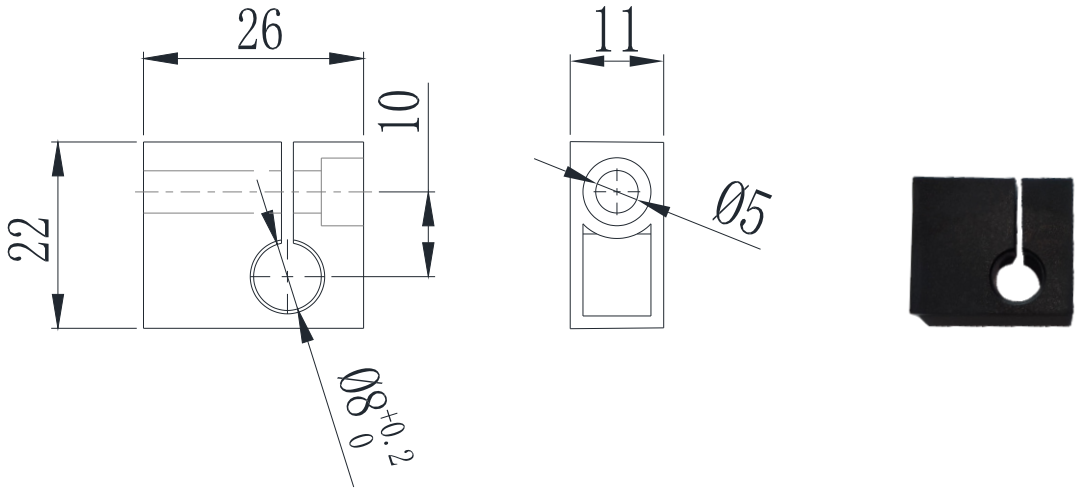
注意事项Caveats：

1.测量前请务必先排除死区（可定制无死区）。
1. Please make sure to eliminate the dead zone before measurement (can be customized without dead zone).

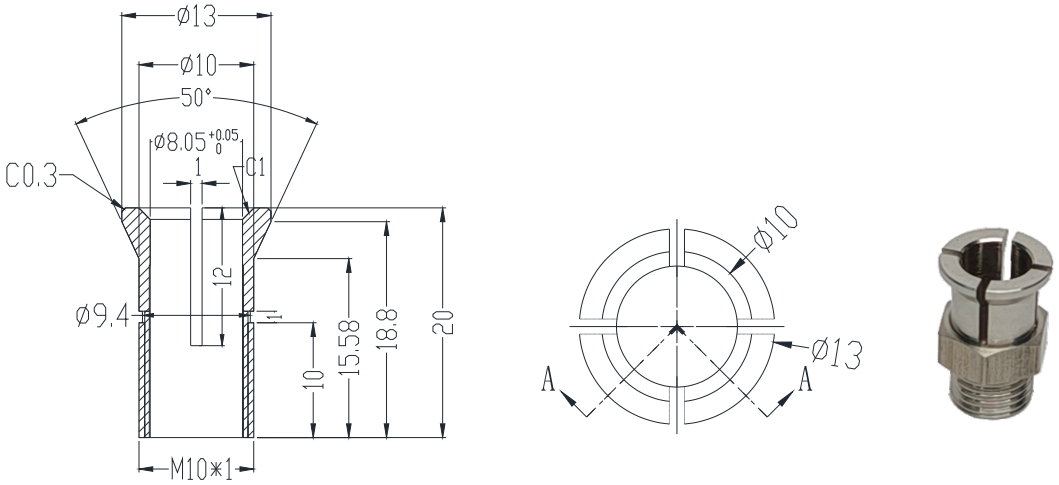
2.笔式位移传感器（LVDT）外径是8mm，自身内部不带电路解调器(即变送器)。外配变送器通过航空插头方式连接。
2. Pen-type displacement transducer (LVDT) the outer diameter is 8mm, and there is no internal circuit demodulator (i.e. transmitter). The external transmitter is connected by means of an aviation plug.

3.LVDT8-P加强屏蔽系列测笔添加了屏蔽功能，解决了测笔与测笔之间的相互干扰问题。更适合矩阵安装场景，测笔的安装最小间距为5-10mm，测笔的易损件铁芯和弹簧可以方便更换。若需要更小安装间距需要额外定制屏蔽功能。
3. The LVDT8-P Enhanced Shielded Series stylus has a shielding function that solves the problem of stylus-to-stylus interference. Better suited to matrix installation scenarios, the styli can be mounted with a maximum spacing of 5-10mm, and the stylus's wear parts, the core and spring, can be easily replaced. Smaller spacing requires additional customized shielding.

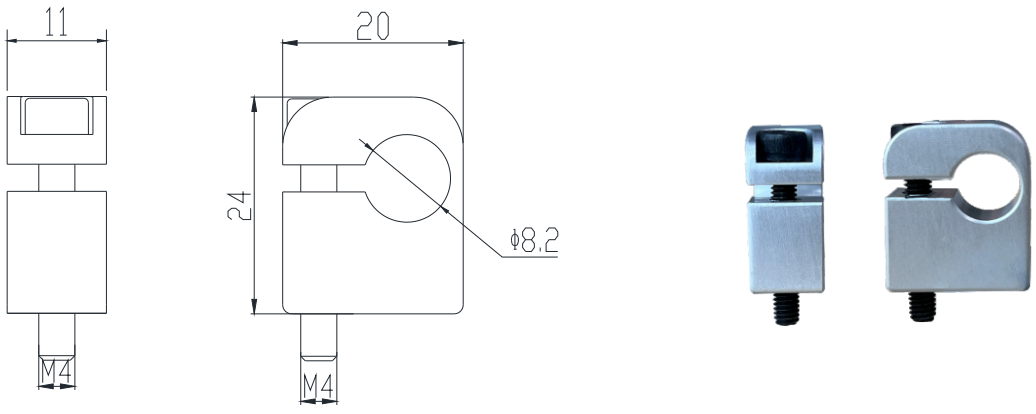
LVDT8/LVDT8-P塑料安装支架-测笔ϕ8 (默认)
LVDT8/LVDT8-P plastic mounting support - stylus ϕ8 (default)



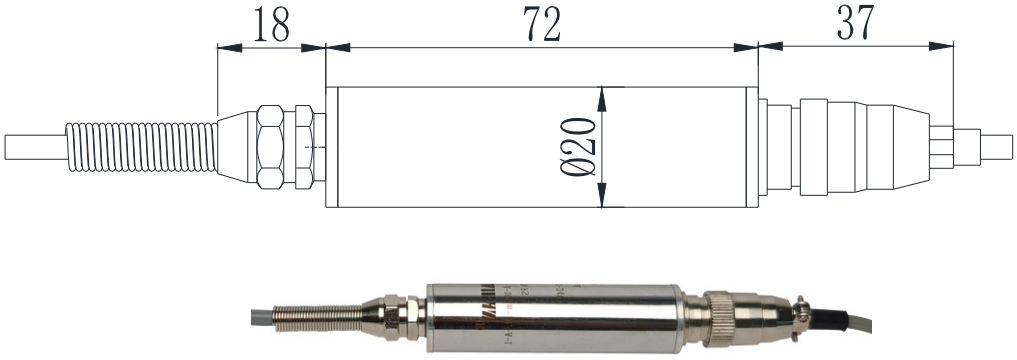
LVDT8/LVDT8-P圆形金属安装支架-测笔ϕ8(选配)
LVDT8/LVDT8-P round metal mounting bracket - stylus ϕ8 (optional)



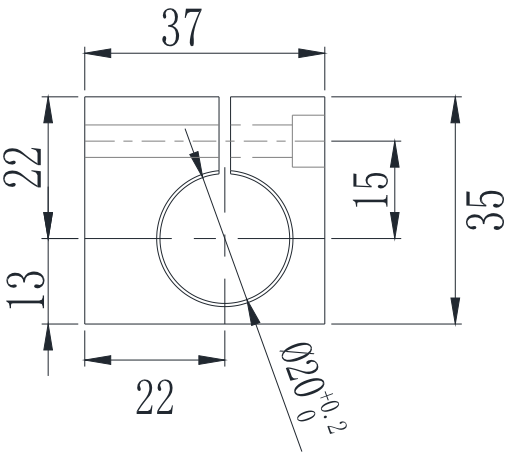
LVDT8/LVDT8-P方形金属安装支架-测笔ϕ8(选配)
LVDT8/LVDT8-P square metal mounting bracket - stylus ϕ8 (optional)

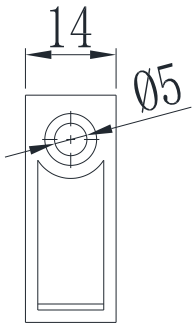


A型电子仓(模拟量)
Type A electronic silo (analog)



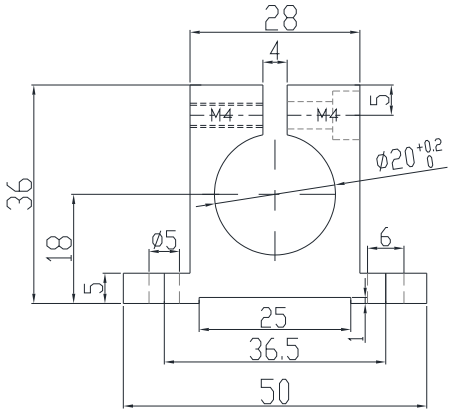
塑料安装支架-电子仓φ20(默认)
plastic mounting support - electronic silo φ20 (default)

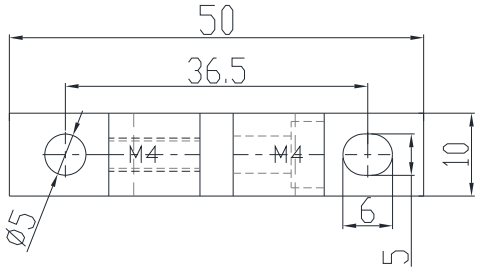






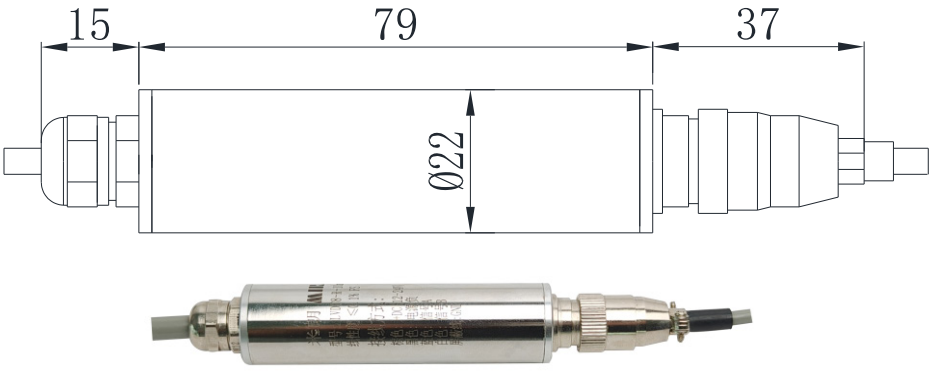
铝制安装支架-电子仓φ20(选配)
aluminum mounting support - electronic silo φ20 (optional)



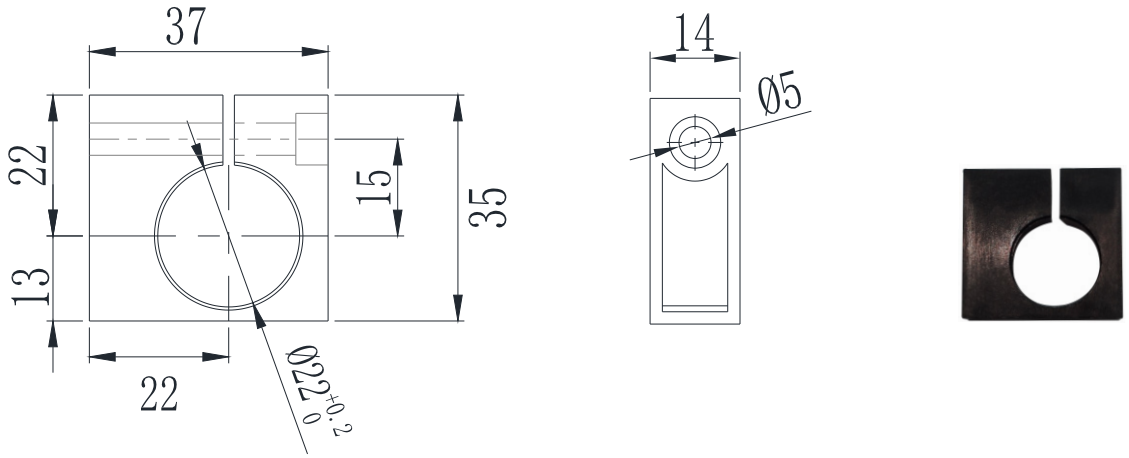




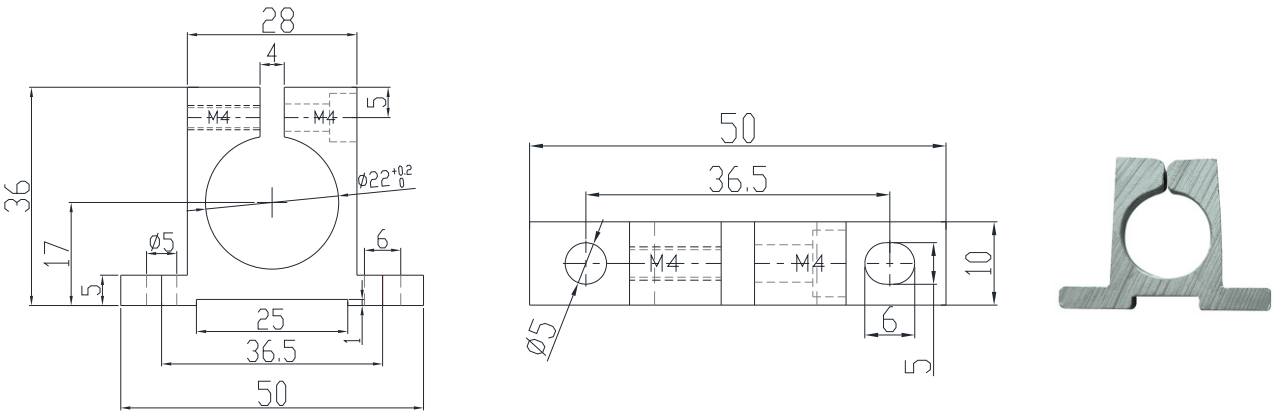
A型电子仓（数字量）
Type A electronic silo (digital)



塑料安装支架-电子仓ϕ22（默认）
plastic mounting support - electronic silo ϕ22 (default)



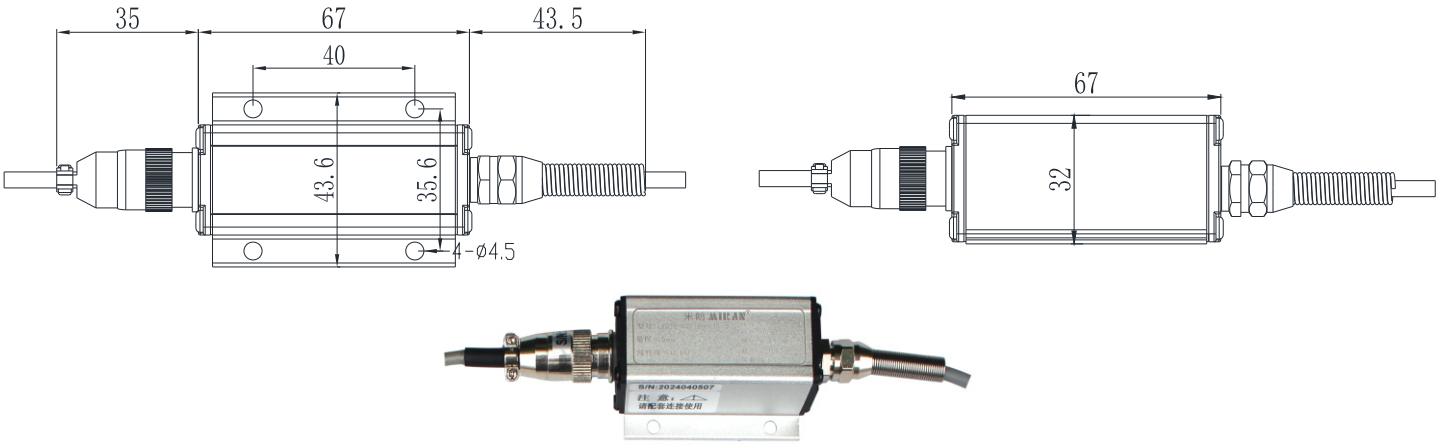
铝制安装支架-电子仓ϕ22（选配）
aluminum mounting support - electronic silo ϕ22 (optional)



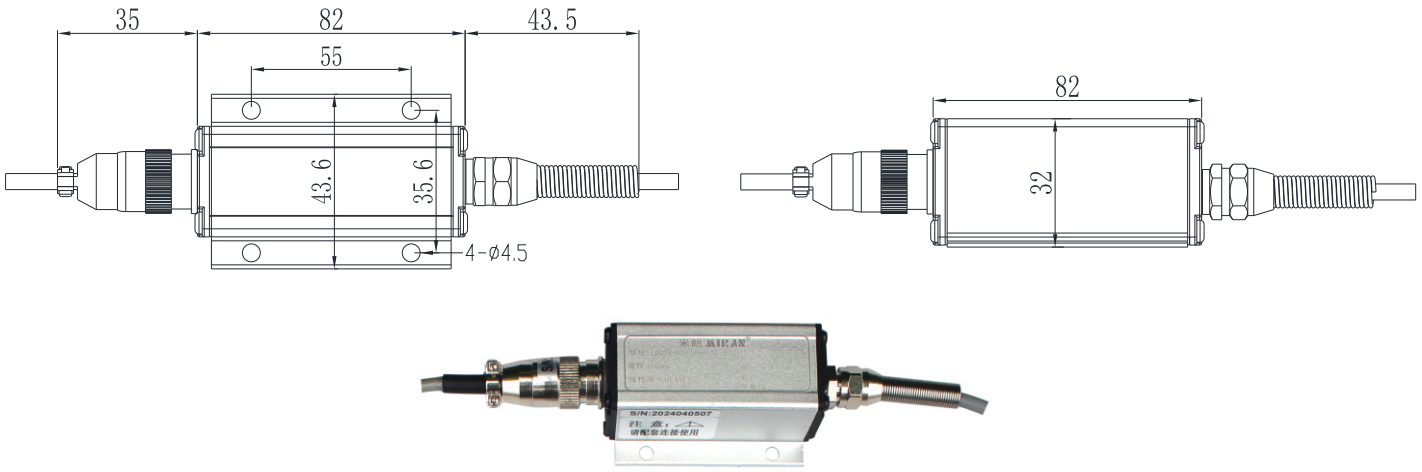
B型电子仓
Type B electronic warehouse

新款B型电子仓(默认)
New type B electronic silo (default)

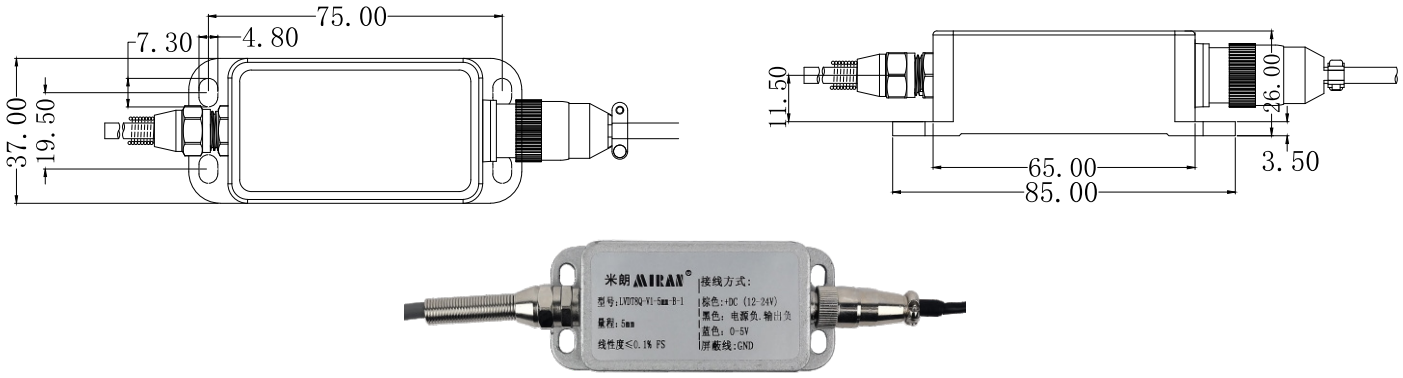
模拟量信号
Analog signal



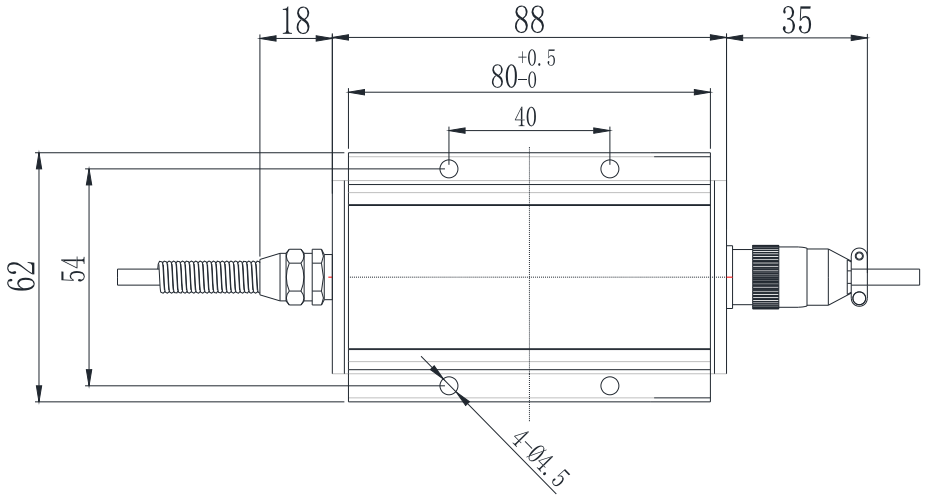
数字量信号
Digital signal

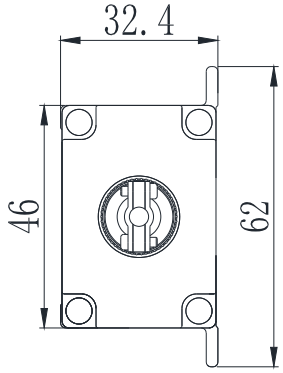


旧款B型电子仓(可选)
old type B electronic silo (optional)



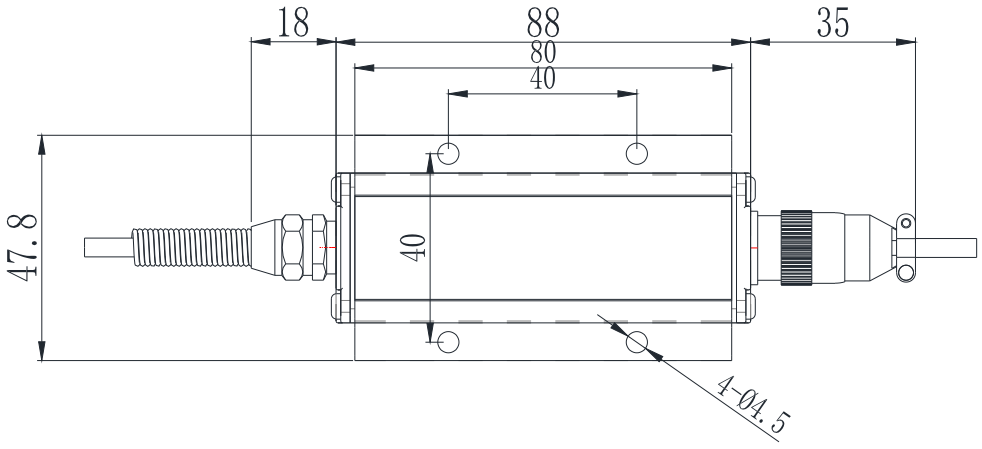
四线制C型电子仓Four-wire C-type electronic warehouse

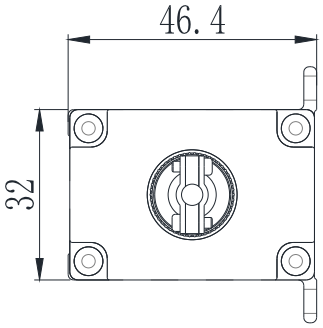






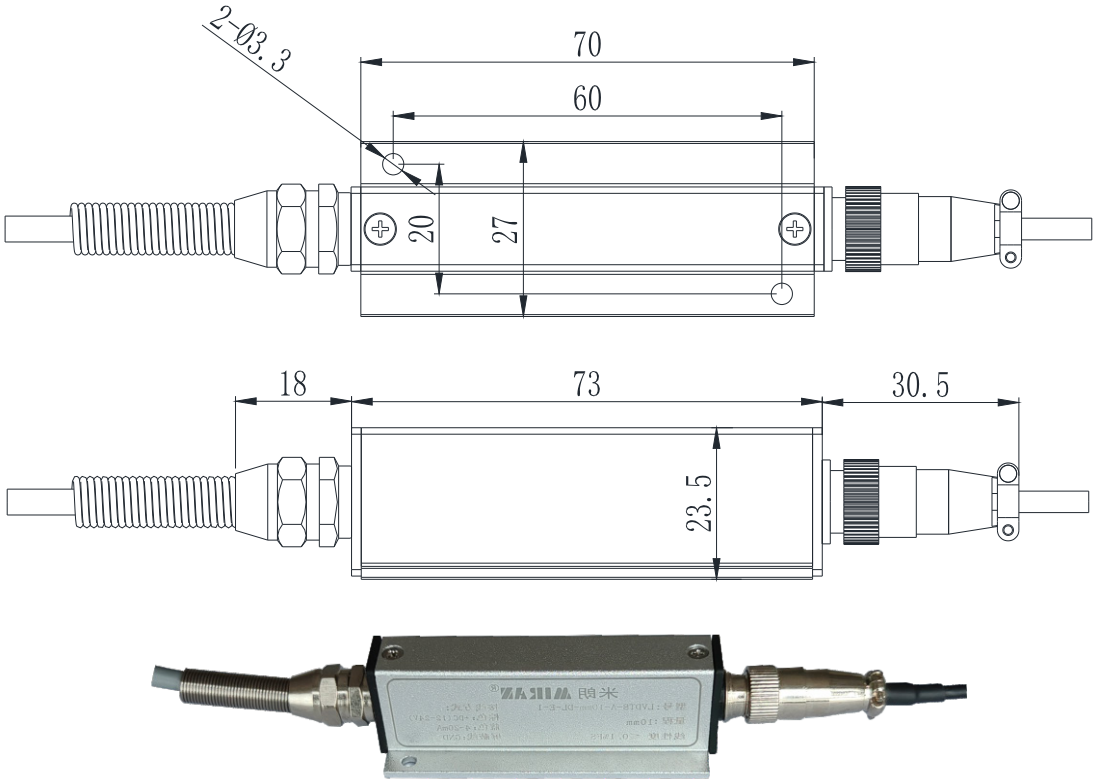
四线制D型电子仓Four-wire D-type electronic warehouse



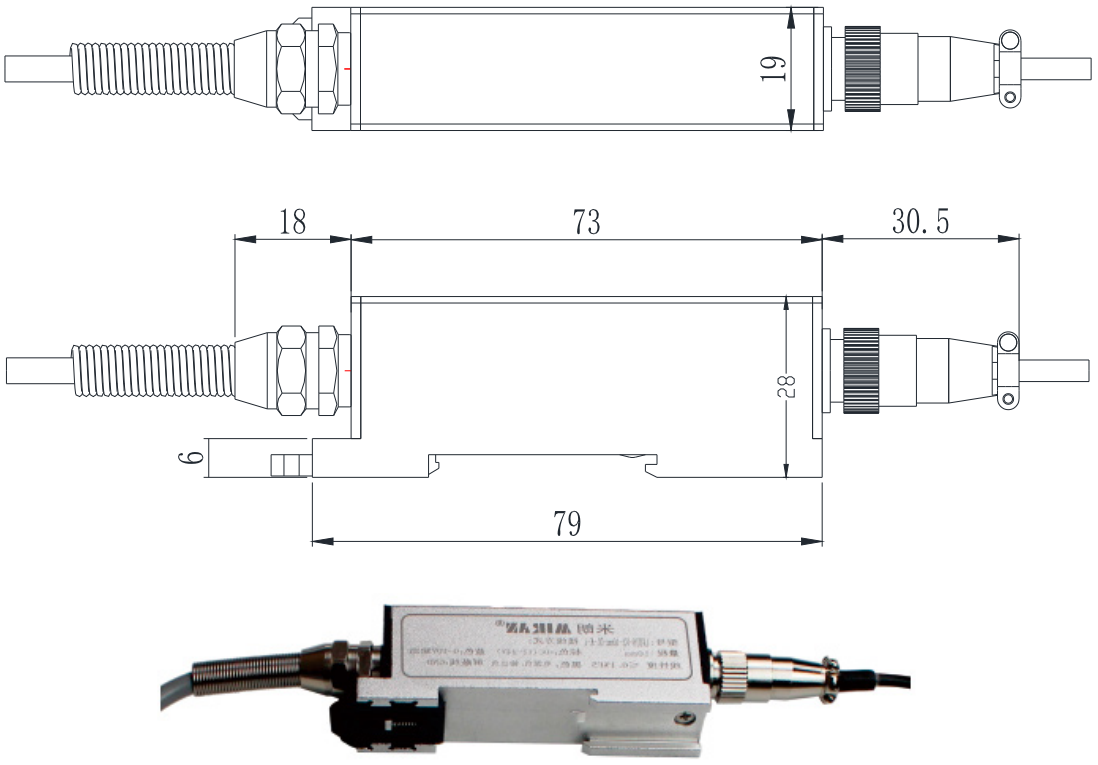




E型带耳安装式电子仓
E-type with ear-mounted electronic compartment



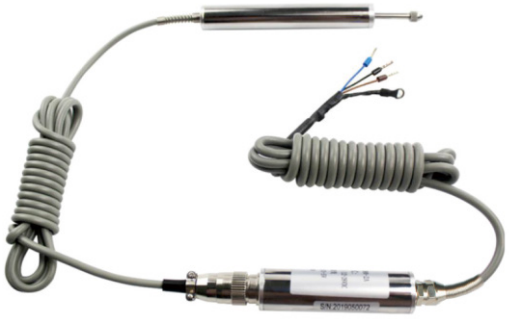
K型导轨卡扣式电子仓
K-rail snap-on electronic bin

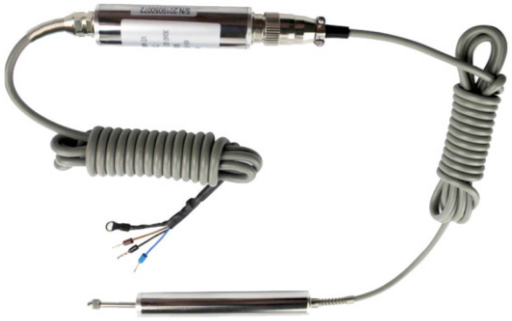


LVDT20/C20差动变压器式位移传感器
LVDT20/C20 Differential Transformer Type Displacement Sensor

产品实物图Product Picture

LVDT20回弹分体式直出线
LVDT20 rebound split straight out line





LVDT20回弹分体式侧出线
LVDT20 rebound split side outlets





LVDT20回弹一体式
LVDT20 rebound one-piece



A型A-type



B型B-type

LVDTC20 拉杆分体式
LVDTC20 tie rod split



LVDTC20分体式直出线
LVDTC20 split straight outlet



LVDTC20分体式测出线
LVDTC20 split outlet line

LVDTC20 拉杆一体式
LVDTC20 tie rod one piece



A型A-type



B型B-type

产品概述Product Overview

LVDT20/C20差动变压器式位移传感器具有优良的性能，适用于质量控制和计量应用中的高精度，高重复性的测量。该传感器采用方便的单电源+12～24V DC供电，电子电路密封在304不锈钢金属管内，可以在潮湿和灰尘等恶劣环境中工作。LVDT20/C20差动变压器式位移传感器特点为内置精密直线轴承，重复性好，探头为氮化硅陶瓷球，耐磨性好，无滑动触点，使用寿命长，直流单电源供电，内置高性能信号解调器，二线制4-20mA电流输出，三线制0-5V或0-10V电压输出，四线制RS485数字信号输出。

The LVDT20/C20 differential transformer type displacement transducer offers excellent performance for high accuracy, high repeatability measurements in quality control and metrology applications. The sensor is powered by a convenient single +12 to 24V DC power supply, the electronic circuitry is sealed in a 304 stainless steel metal tube, and can work in harsh environments such as humidity and dust. The LVDT20/C20 differential transformer-type displacement transducer is characterized by a built-in precision linear bearing for good repeatability, a silicon nitride ceramic ball for the probe for good abrasion resistance, non-slip contacts for long service life, a single DC power supply, a built-in high-performance signal demodulator, and a two-wire system to provide high accuracy and high repeatability. Power supply, built-in high-performance signal demodulator, two-wire 4-20mA current output, three-wire 0-5V or 0-10V voltage output, four-wire RS485 digital signal output.

产品型号选型Product Model Selection

LVDT □-□-□□-□□-□-□-□/□-□

20：回弹式系列
20: rebound series
C20：拉杆式系列
C20: trolley series

A：4-20mA输出
A: 4-20mA output
V1：0-5V输出
V1: 0-5V output
V2：0-10V输出
V2: 0-10V output
V3：±5V输出（四线制）
V3: ±5V output (4-wire)
V4：±10V输出（四线制）
V4: ±10V output (4-wire)
R：RS485输出
R: RS485 output

X：可选量程(mm)：
X: optional range (mm):
2、5、10、15、20、25、30、40、50、100，200(仅拉杆式)

DL：测笔尾部直出线
DL: stylus tail straight out
SL：测笔尾部侧出线
SL: stylus tail side exit line
SL2：两端鱼眼侧出线（B型拉杆式）
SL2: fisheye side outlets at both ends (B-type pull rod type)
DZ：特殊定制型
DZ: special customized type

1：表示精度≤0.1%FS
(适用于量程5mm)
1:indication accuracy ≤0.1%FS
(for range 5mm)
2：表示精度≤0.15%FS
(适用于量程2,10,15,20,25,30,40,50mm)
2:indication accuracy ≤0.15%FS
(for range 2,10,15,20,25,30,40,50mm)
3：表示精度≤0.25%FS
(适用于量程100mm，需要高精度的和工程联系)
3:indication accuracy ≤0.25%FS
(Applicable to a measurement range of 100mm, requiring high precision and for engineering purposes)
4：表示精度≤1%FS
4:indication accuracy≤1%FS

Y：一体式
Y: one-piece
F：分体式
F: split type

P：加强屏蔽系列（可选）
P: reinforced shielding series (optional)


A型分体式电子仓
Type A split electronic silo


A型一体式
Type A one-piece


B型分体式电子仓
Type B split electronic silo


B型一体式
Type B one-piece


C型分体式电子仓
Type C split electronic silo


D型分体式电子仓
Type D split electronic silo


E型分体式电子仓
Type E split electronic silo


K型分体式电子仓
Type K split electronic silo

A:
分体式：电子仓是直径20mm（模拟量）/22mm（数字量）的圆管
split type: the electronic silo is a cylindrical tube with a diameter of 20mm (analog) / 22mm (digital)
一体式：电子仓是直径20mm（模拟量）/22mm（数字量）的圆管，测笔线圈直径15mm
all-in-one: the electronic silo is a cylindrical tube with a diameter of 20mm (analog) / 22mm (digital), 15mm diameter stylus coil

B:
分体式：电子仓是长方块（默认新款，旧款可选）
split: electronic compartment is rectangular (default new model,old model optional)
一体式：电子仓，测笔线圈直径都是20mm（模拟量）/22mm（数字量）
all-in-one: electronic warehouse, the coil diameter of the measuring pen is 20mm (analog) / 22mm (digital)

C:
分体式：电子仓是卧式长方形L80*W62*H32mm（四线制专用电子仓）
split: electronic compartment is horizontal rectangle L80*W62*H32mm (4-wire special electronic compartment)

D:
分体式：电子仓是卧式长方形L80*W48*H46mm（四线制专用电子仓）
split: electronic compartment is horizontal rectangle L80*W48*H46mm (4-wire special electronic compartment)

E:
分体式：电子仓是长方形L73*W27*H24mm
split: electronic compartment is rectangular L73*W27*H24mm

K:
分体式：电子仓是导轨卡扣式L73*W19*H28mm
split: electronic compartment is rail snap type L73*W19*H28mm

例如：LVDTC20-A-5mm-DL-A-1/F表示LVDTC20拉杆式系列，4-20mA信号输出，量程5mm，测笔尾部直出线，A型电子仓，精度≤0.1%FS，分体式。
Example: LVDTC20-A-5mm-DL-A-1/F Meter LVDTC20 pull-rod type series, 4-20mA signal output, range 5mm, straight out wire at the end of the stylus, A-type sub-compartment, accuracy ≤0.1%FS, split type.

注意事项caveat

1、LVDT20回弹式系列下单默认不带防尘套，如需带防尘套，下单时需备注。
1、LVDT20 rebound series order default does not come with a dust cover, if you need to bring a dust cover, you need to note when ordering.

2、LVDT20-P回弹式加强屏蔽系列下单默认不带防尘套，如需带防尘套，下单时需备注。目前LVDT20-P回弹式加强屏蔽系列要求测笔直径为15mm，因此B型一体式（测笔直径20/22mm）不可做LVDT20-P回弹式加强屏蔽系列。
2、LVDT20-P rebound reinforced shielding series order default without a dust cover, such as the need to bring a dust cover, the need to note when ordering. Currently the LVDT20-P rebound reinforced shielding series requires a stylus diameter of 15mm, so the B-type one-piece (stylus diameter 20/22mm) cannot be made into the LVDT20-P rebound reinforced shielding series.

3、LVDTC20拉杆式、LVDTC20-P拉杆式加强屏蔽系列均不带防尘套。目前LVDTC20-P加强屏蔽系列要求测笔直径为15mm，因此B型一体式（测笔直径20/22mm）不可做LVDTC20-P加强屏蔽系列。
3、 The LVDTC20 trolley and LVDTC20-P trolley enhanced shielding series do not come with a dust cover. Currently the LVDTC20-P enhanced shielding series requires a stylus diameter of 15mm, so the B-type one-piece (stylus diameter 20/22mm) is not available for the LVDTC20-P enhanced shielding series.

4、LVDT20-P/LVDTC20-P加强屏蔽系列是在LVDT20/LVDTC20测笔基础上加强屏蔽功能。LVDT20-P/LVDTC20-P加强屏蔽系列外形尺寸与LVDT20/LVDTC20外形尺寸相同，但工艺和材料略有不同。
4、LVDT20-P / LVDTC20-P enhanced shielding series is based on the LVDT20 / LVDTC20 stylus to strengthen the shielding function. LVDT20-P / LVDTC20-P enhanced shielding series and LVDT20 / LVDTC20 external dimensions and LVDT20 / LVDTC20 external dimensions are the same, but the process and materials are slightly different.

5、LVDT20/LVDTC20系列如需要矩阵安装，每只测笔之间的安装最小间距不小于40mm；若需要更小安装间距，请选LVDT20-P/LVDTC20-P加强屏蔽系列，LVDT20-P/LVDTC20-P加强屏蔽系列矩阵安装时，每只测笔之间的安装最小间距为5-10mm。
5、LVDT20/LVDTC20 series, if matrix installation is required, the minimum spacing between each stylus is not less than 40mm; if smaller spacing is required, please select LVDT20-P/LVDTC20-P reinforced shielding series, LVDT20-P/LVDTC20-P reinforced shielding series matrix installation, the minimum spacing between each stylus is 5-10mm. 10mm.

6、测量前请务必先排除死区（可定制无死区）。
6、Please be sure to remove the dead zone before measurement (can be customized without dead zone).

7、A型分体式电子仓模拟量输出直径20mm，数字量输出直径22mm；旧款B型分体式电子仓，E型分体式电子尺和K型分体式电子仓仅可做模拟量信号输出；新款B型分体式电子仓，C型分体式电子仓和D型分体式电子仓可做模拟量信号输出或数字量信号输出。
7、Model A split terminal analog output diameter 20mm, digital output diameter 22mm; old model b split terminal, model E split terminal and model K split terminal can be used for analog signal output only; new model B split terminal, model C split terminal and model D split terminal can be used for analog signal output or digital signal output.

8、4-20mA电流输出默认为二线制，可选四线制；0-5V和0-10V电压输出默认为三线制，可选4线制；±5V和±10V电压信号输出只能做四线制（以上信号输出选择四线制时下单需备注且只能选择C型分体式电子仓或者D型分体式电子仓）。
8、4-20mA current output is 2-wire by default, 4-wire optional; 0-5V and 0-10V voltage output is 3-wire by default, 4-wire optional; ±5V and ±10V voltage signal output can only be done in 4-wire system (when choosing 4-wire system for the above signal output, you need to make a note when placing an order and you can only choose the C-type split sub-electronic sub-store or the D-type split sub-electronic sub-store)

9、传感器测笔和变送器必须配套（测笔编号与变送器编号一致）使用，禁止随意调换，否则传感器线性精度将严重失真。
9、The sensor stylus and transmitter must be used as a matched set (stylus number and transmitter number are the same) and must not be switched, or the sensor linearity accuracy will be severely distorted.

10、回弹式的LVDT传感器默认未压缩数值最小，压缩到底数值最大；拉杆式的LVDT传感器默认没拉出数值最大，完全拉出数值最小。如需改变输出大小方向，请提前告知！
10、The default value of the rebound LVDT sensor is the smallest uncompressed value, and the value of the fully compressed value is the largest; the default value of the lever-type LVDT sensor is the smallest value when it is not pulled out, and the value of the fully pulled out value is the smallest. If you need to change the output size, please inform us in advance!

性能参数Performance Parameters

电气指标Electrical indicators

型号 Model number	LVDT20/LVDTC20位移传感器 LVDT20/LVDTC20 Displacement Sensor		
输出信号 Output signal	0~5V，0~10V，4~20mA，RS485，±5V，±10V		
分辨率 Resolution	≤0.2um(最高)，数字式输出是16bit ≤0.2um (max.), digital output is 16bit		
位移量程 Displacement range	2mm，5mm，10mm，15mm，20mm，25mm，30mm，40mm，50mm，100mm，200mm（仅拉杆式） 2mm, 5mm, 10mm, 15mm, 20mm, 25mm, 30mm, 40mm, 50mm, 100mm, 200mm (rod type only)		
工作电流 Operating current	电压输出型 电流＜10mA voltage output type current <10mA		
	二线制4-20mA电流输出型 电流3.8~24mA 2-wire 4-20mA current output type current 3.8~24mA		
	RS485输出型 电流15~40MA RS485 output type current 15~40mA		
动态特性 Dynamic property	拉杆式50HZ，回弹式20HZ tie rod type 50HZ, rebound type 20HZ		
线性误差 Linearity error	≤0.1%FS：量程5mm；≤0.15%FS：量程2，10，15，20，25，30，40，50mm；≤0.25%FS：量程100mm ≤0.1%FS: range 5mm; ≤0.15%FS: range 2,10,15,20,25,30,40,50mm;≤0.25%FS: range 100mm		
重复误差 Repeatability	最高可达1μm~10μm up to 1μm~10μm		
灵敏度 Sensitivity	≤0.025%/°C	激励频率 Excitation frequency	5KHZ
耐受冲击 Impact resistance	250g/11毫秒 250g/11 ms	激励电压 Excitation voltage	3Vrms
工作温度 Operating temperature	-25°C~+85°C	振动允限 Vibration tolerance	10g/2KHZ
供电电源 Power supply	+12~24V DC	温度系数 Temperature coefficient	零点≤0.01%/°C zero ≤ 0.01%/°C

重复误差：量程越小重复误差越小。
Repeat error : the smaller the range, the lower the repeat error.

性能指标Performance indicators

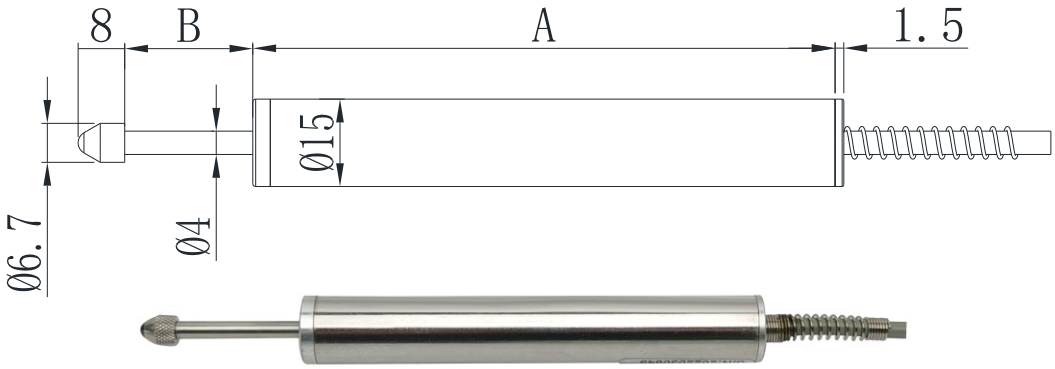
量程 range / 参数 parameters	2mm	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm
标准弹力范围(N) standard stretch range	4.8~6.2	3.0~5.1	3.0~6.6	/	2.7~8.2	3.5~10.4	/	2.4~6.2	2.4~6.2	3.0~13.6
可定制弹力范围(N) customizable stretch range	0.6~0.9	0.5~0.9	0.5~1.4	/	0.5~1.5	0.5~1.2	/	/	/	/
前后死区(mm) front and rear dead zones	0.5	1	1	1	1	1	1	0.5	0.5	2.5

注：安装校准时不能一开始碰到测头就进行测量，必须先排除死区再进行测量，否则数据不准确！
Note: When installing the calibration, you can't measure as soon as you start touching the probe, you must remove the dead zone before measuring, otherwise the data will be inaccurate!

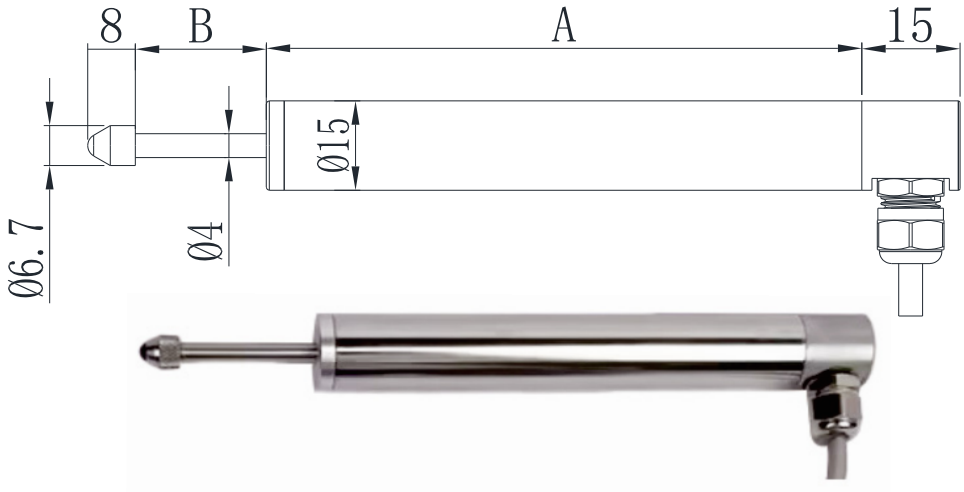
产品尺寸图Product Dimension Drawing

LVDT20/LVDT20-P回弹分体式-测笔-不带防尘套
LVDT20/LVDT20-P rebound split - stylus - without dust cover

直出线direct line



侧出线lateral outlet



参数 parameters / 量程 range	2mm	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm
长度A (mm) length A (mm)	51	80	80	100	100	100	100	193	193	338
长度B (mm) length B (mm)	3	7	12	17	22	27	32	41	51	105
前后死区 (mm) front and rear dead zones	0.5	1	1	1	1	1	1	0.5	0.5	2.5

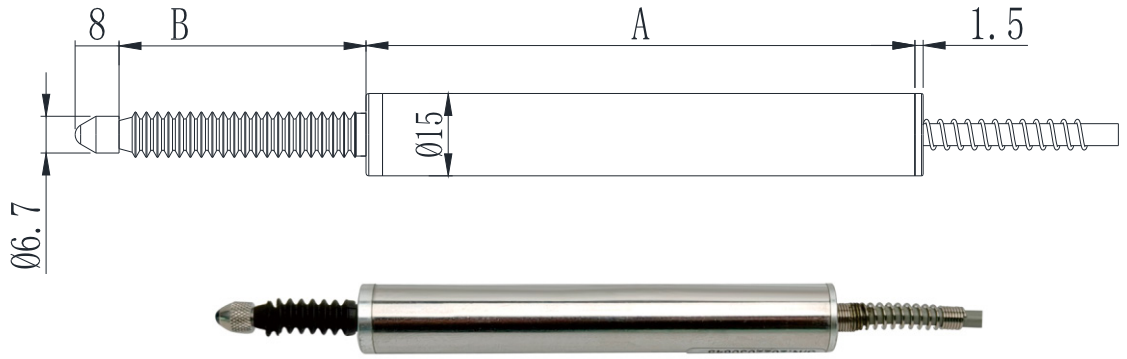
注：分体式需要选型测笔和电子仓，一体式的测笔和电子仓是一体的，不需要再额外选型电子仓。

Note: The split type requires the selection of a stylus and battery compartment, while the integrated type has the stylus and battery compartment in one unit, so there is no need to select an additional battery compartment.

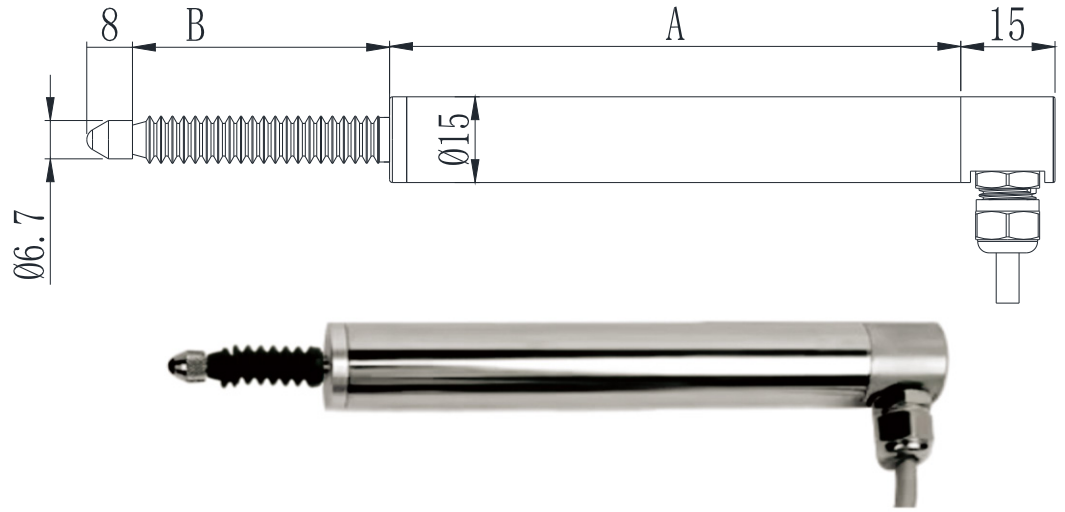
产品尺寸图Product Dimension Drawing

LVDT20/LVDT20-P回弹分体式-测笔-带防尘套
LVDT20/LVDT20-P rebound split - stylus - with dust cover

直出线direct line



侧出线lateral outlet

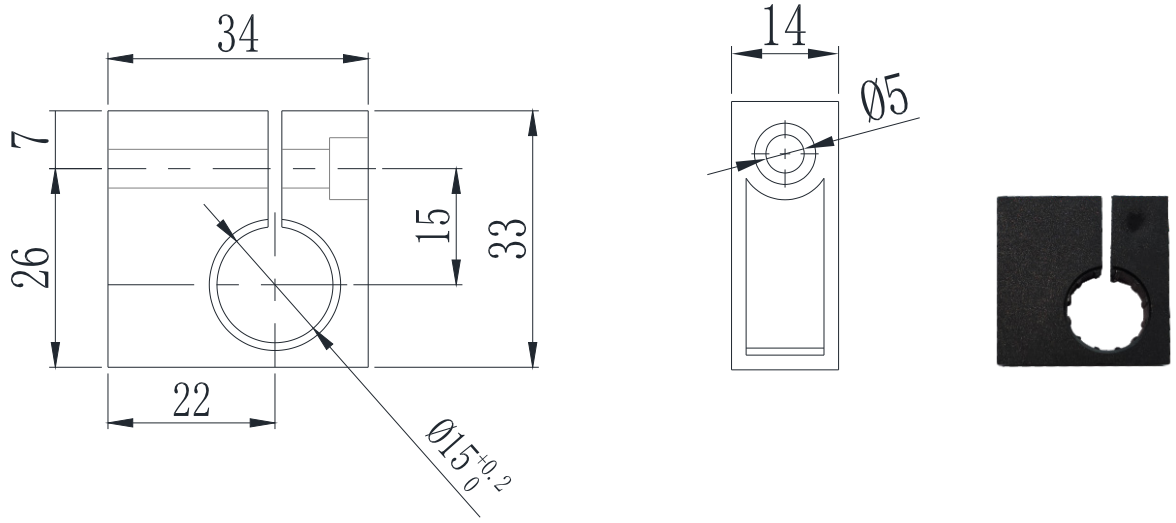


参数 parameters / 量程 range	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm
长度A (mm) length A (mm)	80	80	100	100	100	100	193	193	338
长度B (mm) length B (mm)	20	25	30	42	47	57	71	81	160
前后死区 (mm) front and rear dead zones	1	1	1	1	1	1	0.5	0.5	2.5

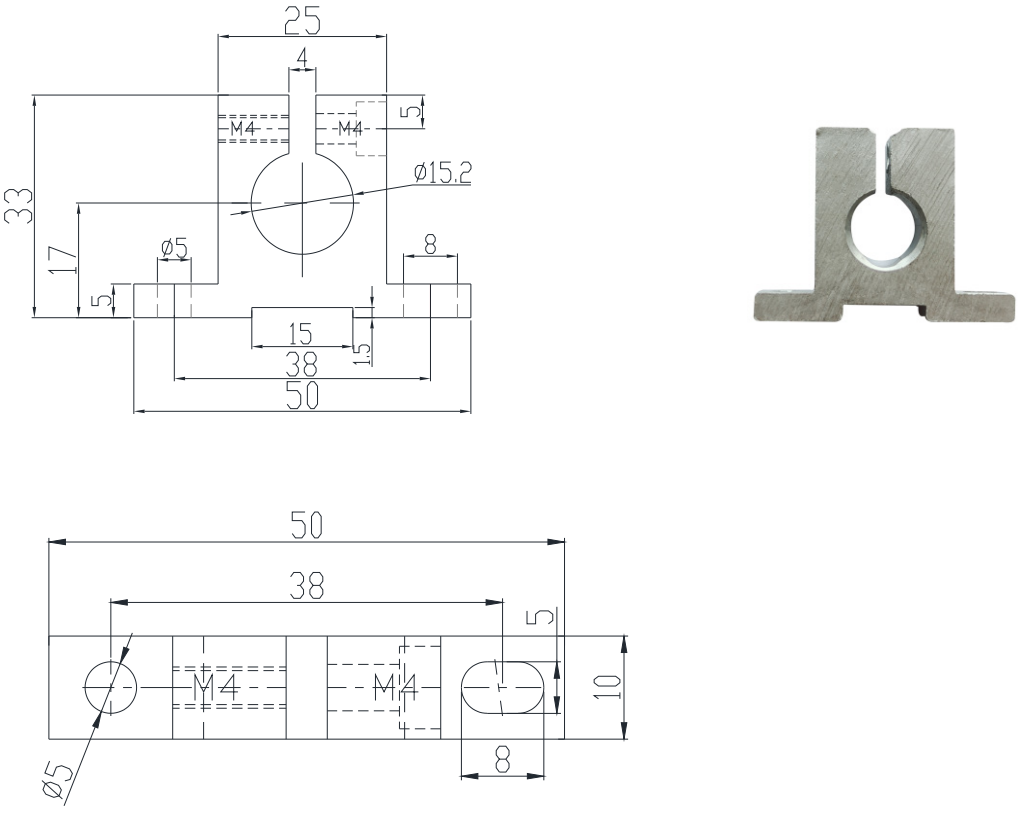
注：回弹分离式需要选型测笔和电子仓，拉杆式、回弹一体式的测笔和电子仓是一体的，不需要再选择电子仓。

Note: Stylus and battery compartment are required for the separate rebound type, while the stylus and battery compartment are integrated for the pull-rod type and the rebound type, and there is no need to select the battery compartment again.

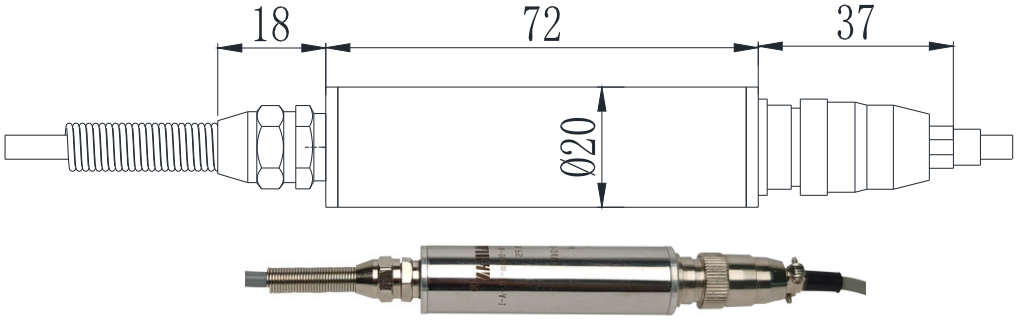
LVDT20/LVDT20-P回弹分体式-塑料安装支架-测笔ϕ15（默认）
LVDT20/LVDT20-P rebound split - plastic mounting bracket - stylus ϕ15 (default)



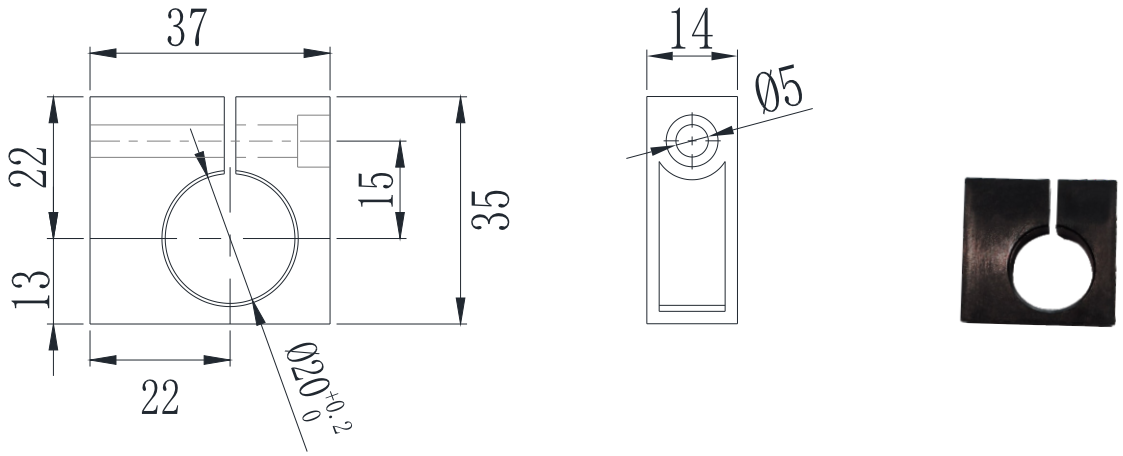
LVDT20/LVDT20-P回弹分体式-铝制安装支架-测笔ϕ15（选配）
LVDT20/LVDT20-P rebound split - aluminum mounting support - stylus ϕ15 (optional)



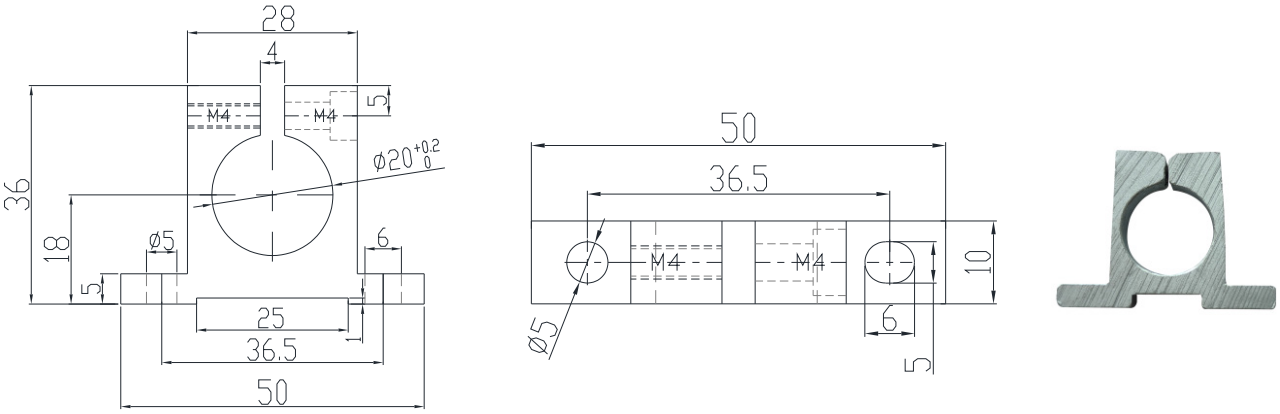
A型电子仓(模拟量)
Type A electronic silo (analog)



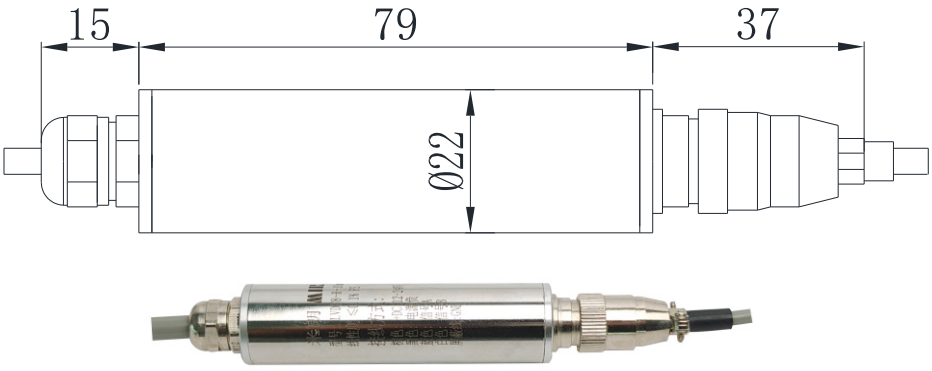
塑料安装支架-电子仓φ20(默认)
plastic mounting bracket - electronic silo φ20 (default)



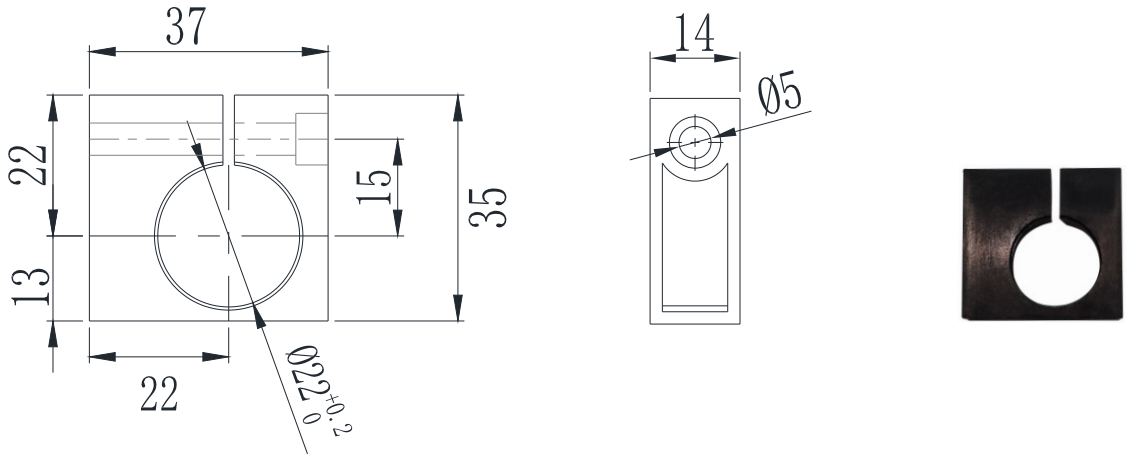
铝制安装支架-电子仓φ20(选配)
aluminum mounting support - electronic silo φ20 (optional)



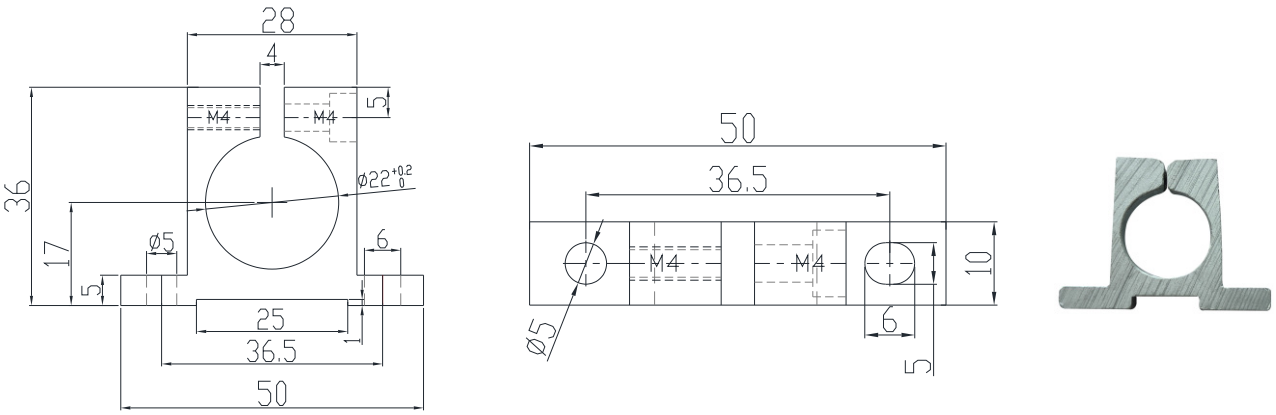
A型电子仓(数字量)
Type A electronic silo (digital)



塑料安装支架-电子仓φ22(默认)
plastic mounting bracket - electronic silo ϕ22 (default)



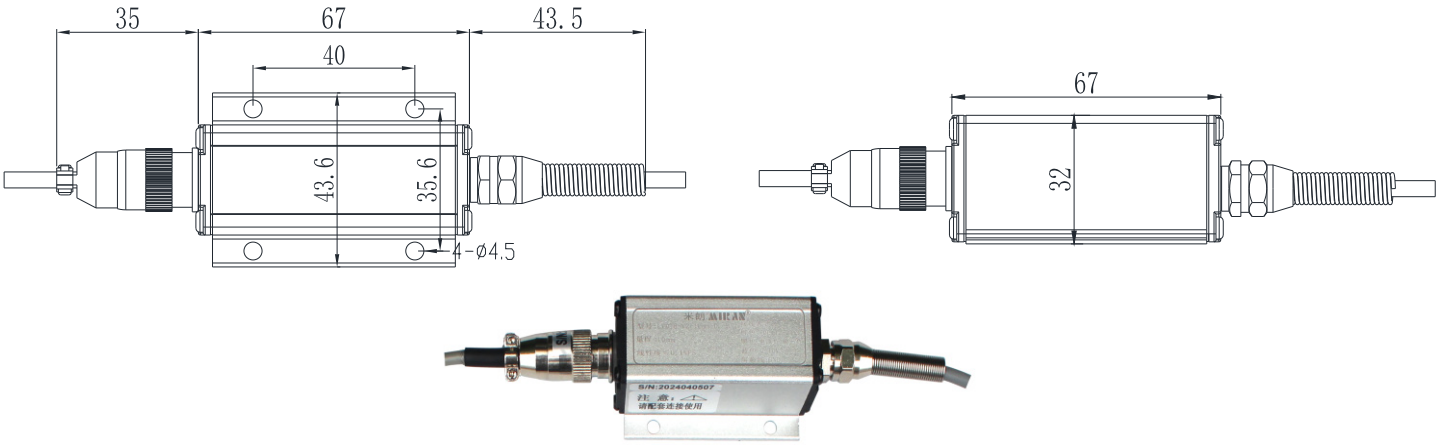
铝制安装支架-电子仓φ22(选配)
aluminum mounting support - electronic silo ϕ22 (optional)



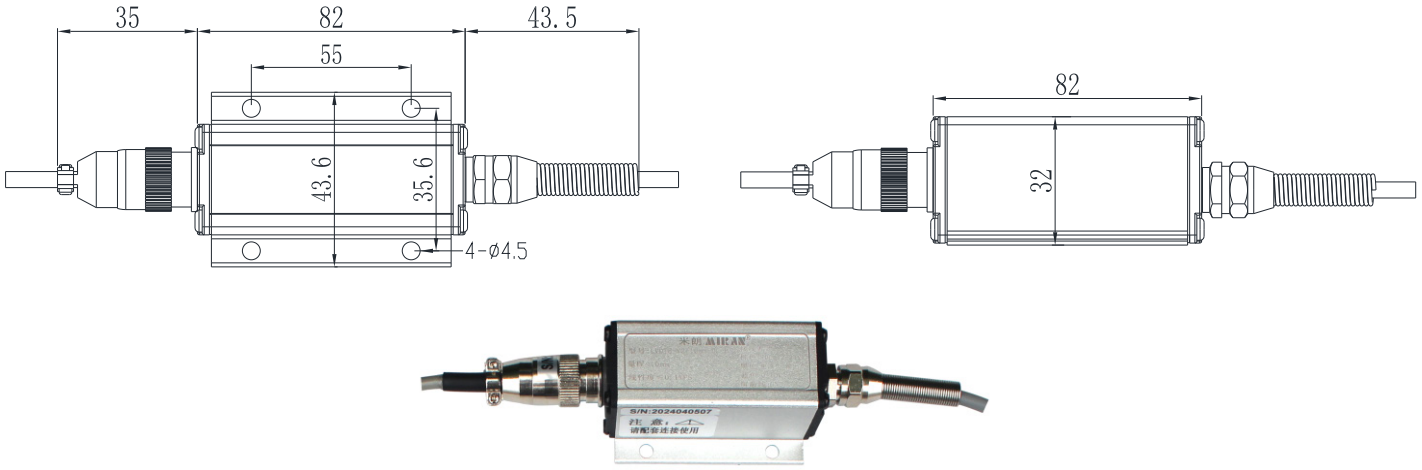
B型电子仓
Type B electronic warehouse

新款B型电子仓(默认)
New type B electronic silo (default)

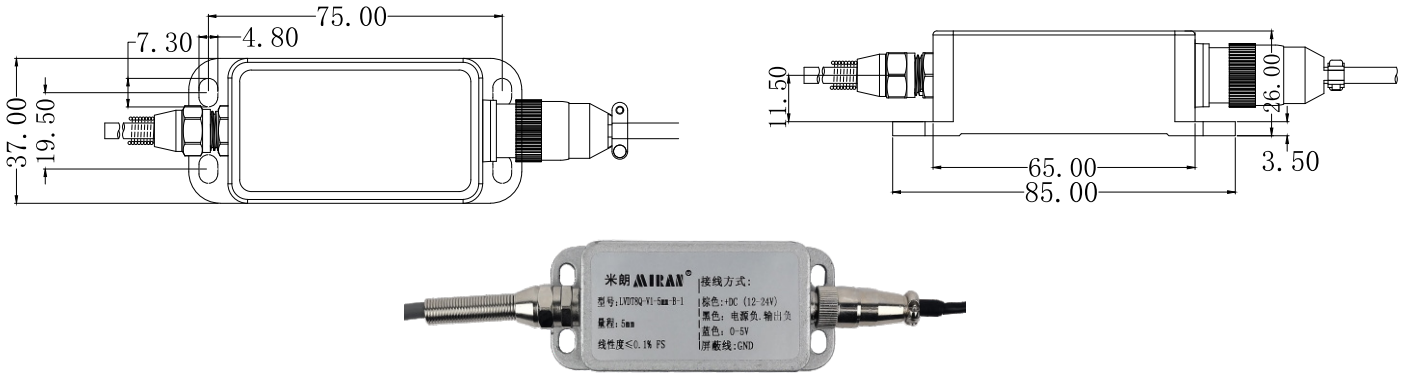
模拟量信号
Analog signal



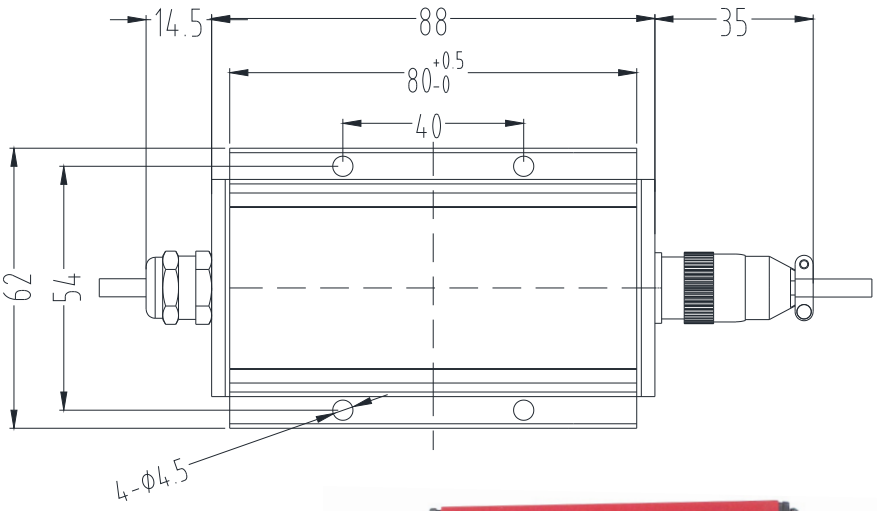
数字量信号
Digital signal

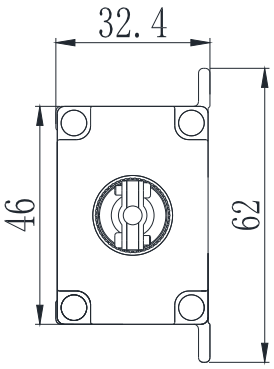


旧款B型电子仓(可选)
old type B electronic silo (optional)



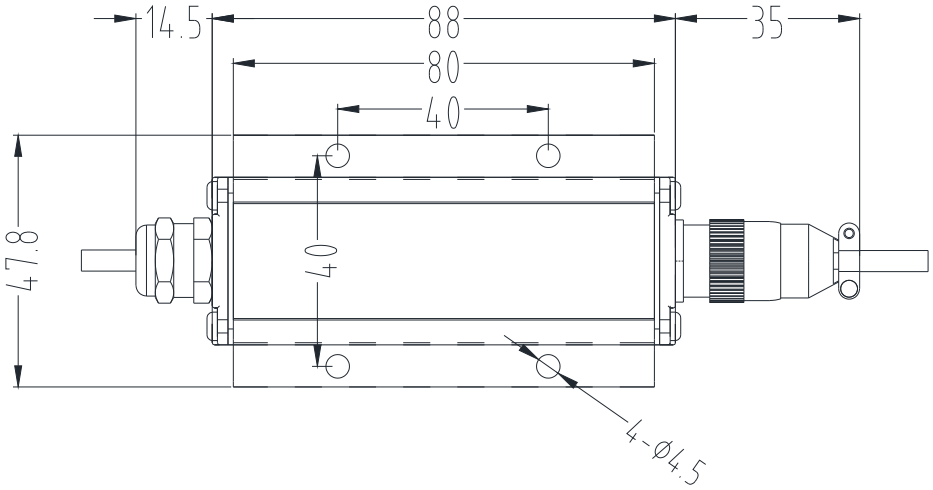
四线制C型电子仓Four-wire C-type electronic warehouse

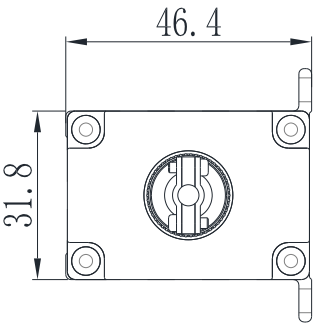






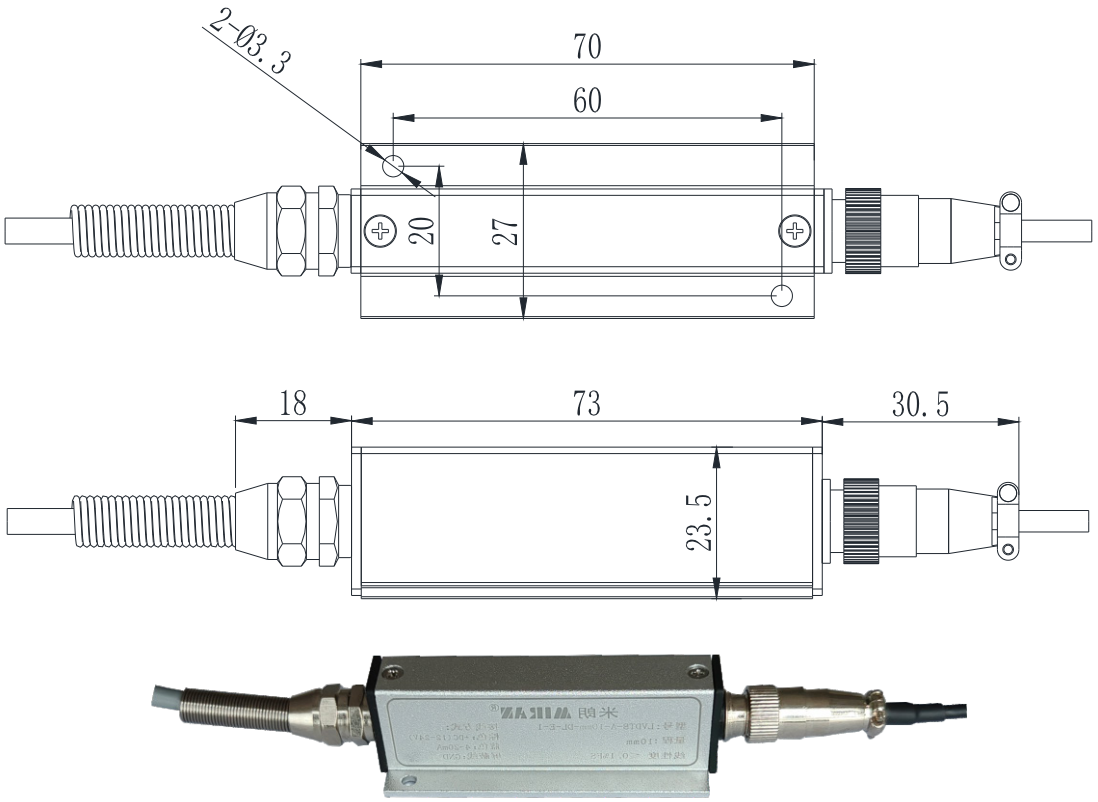
四线制D型电子仓Four-wire D-type electronic warehouse



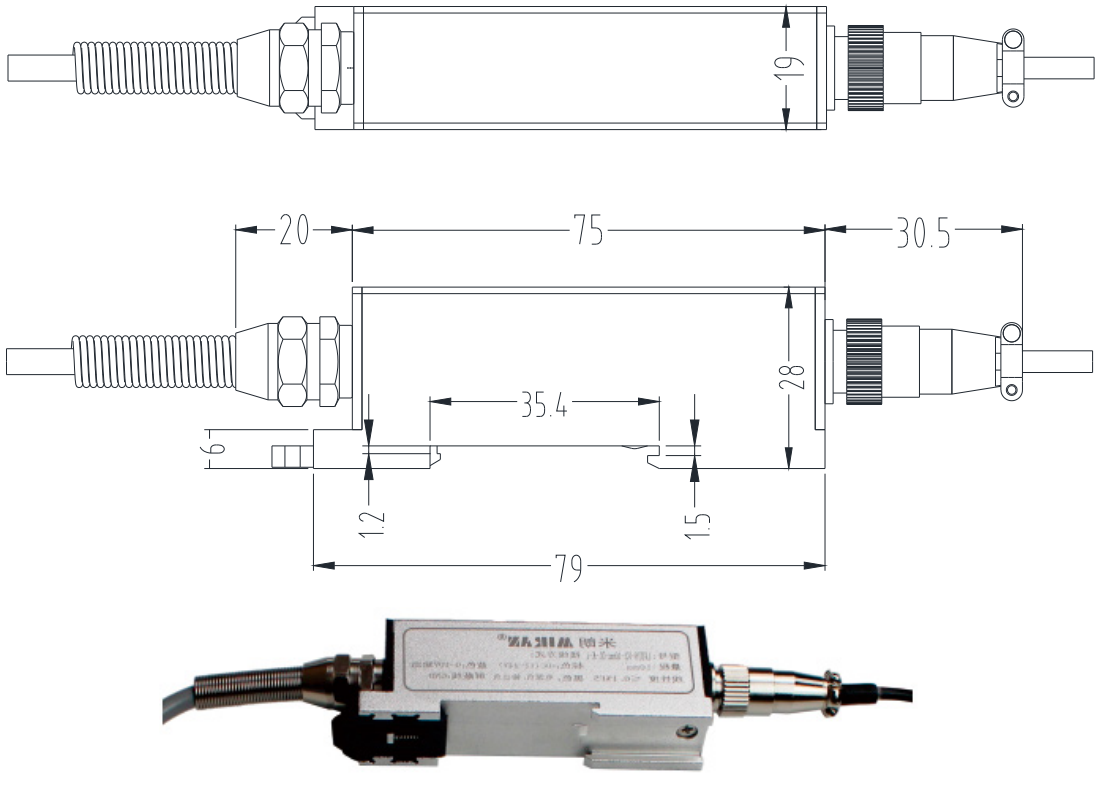




E型带耳安装式电子仓
E-type with ear-mounted electronic compartment



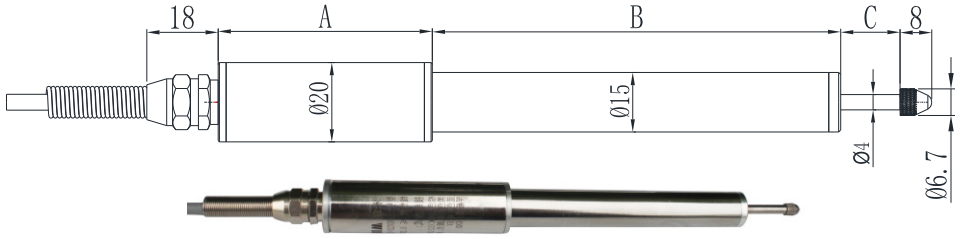
K型导轨卡扣式电子仓
K-rail snap-on electronic bin



产品尺寸图Product Dimension Drawing

LVDT20/LVDT20-P回弹一体式-不带防尘套-模拟量信号输出
LVDT20/LVDT20-P rebound one piece - without dust jacket - analog signal output

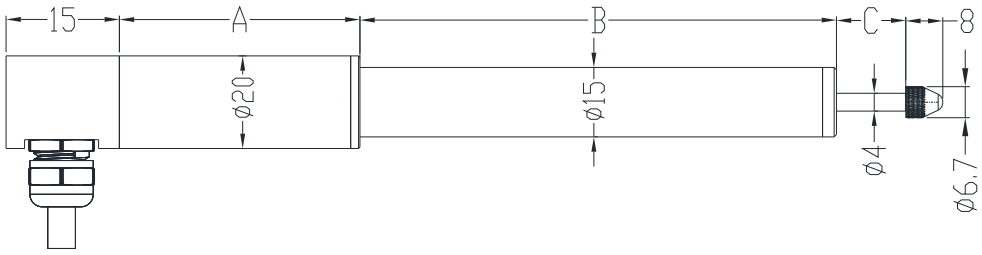
A型直出线 A type straight out line



参数 parameters / 量程 range	2mm	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm
长度A (mm) length A (mm)	69	69	69	69	69	69	69	69	69	69
长度B (mm) length B (mm)	51	80	80	100	100	100	100	193	193	338
长度C (mm) length C (mm)	3	7	12	17	22	27	32	41	51	105
前后死区 (mm) front and rear dead zones (mm)	0.5	1	1	1	1	1	1	0.5	0.5	2.5

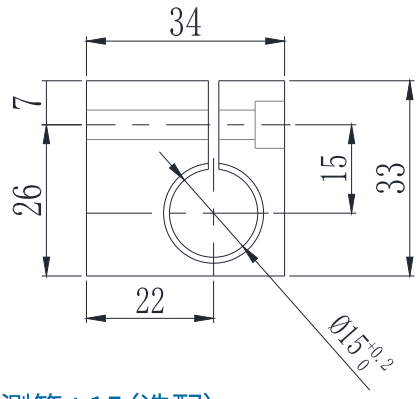
LVDT20/LVDT20-P回弹一体式-不带防尘套-模拟量信号输出
LVDT20/LVDT20-P rebound one piece - without dust jacket - analog signal output

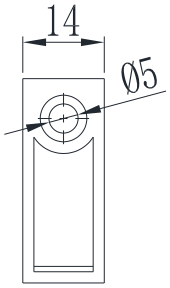
A型侧出线 A type lateral outlet



参数 parameters / 量程 range	2mm	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm
长度A (mm) length A (mm)	67	67	67	67	67	67	67	67	67	67
长度B (mm) length B (mm)	51	80	80	100	100	100	100	193	193	338
长度C (mm) length C (mm)	3	7	12	17	22	27	32	41	51	105
前后死区 (mm) front and rear dead zones	0.5	1	1	1	1	1	1	0.5	0.5	2.5

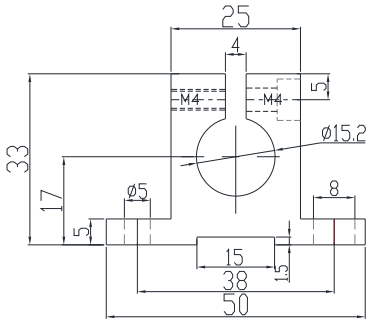
塑料安装支架-测笔φ15（默认）
plastic mounting bracket - stylus ϕ15 (default)

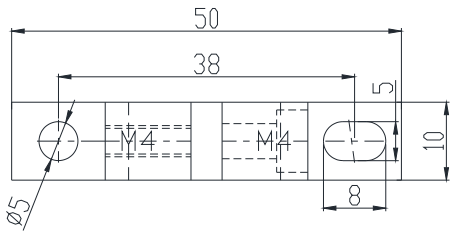






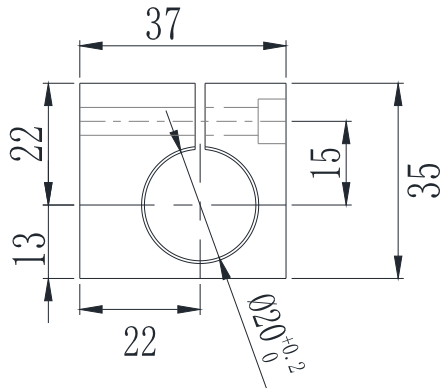
铝制安装支架-测笔φ15（选配）
aluminum mounting support - stylus ϕ15 (optional)

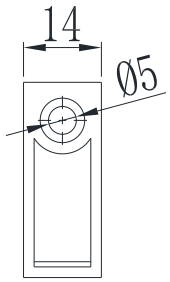






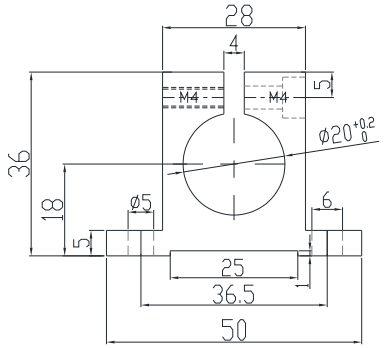
塑料安装支架-电子仓φ20（默认）
plastic mounting support - electronic silo ϕ20 (default)

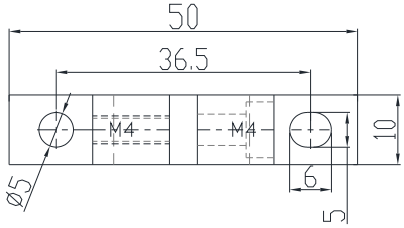






铝制安装支架-电子仓φ20（选配）
aluminum mounting support - electronic silo ϕ20 (optional)



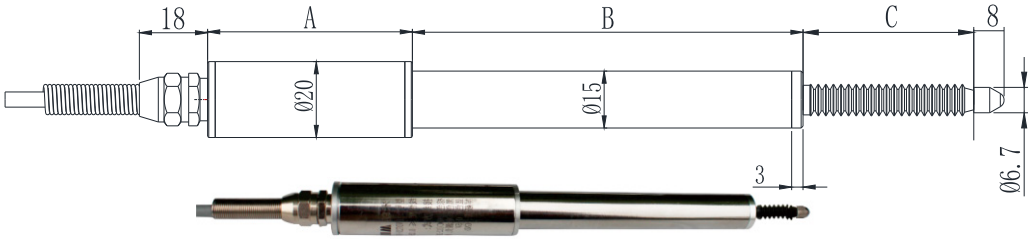




产品尺寸图Product Dimension Drawing

LVDT20/LVDT20-P回弹一体式-带防尘套-模拟量信号输出
LVDT20/LVDT20-P rebound one piece - with dust jacket - analog signal output

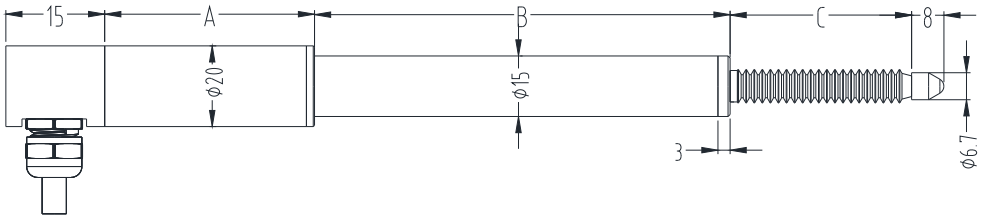
A型直出线 A type straight out line



参数 parameters / 量程 range	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm
长度A (mm) length A (mm)	69	69	69	69	69	69	69	69	69
长度B (mm) length B (mm)	80	80	100	100	100	100	193	193	338
长度C (mm) length C (mm)	20	25	30	42	47	57	71	81	160
前后死区 (mm) front and rear dead zones (mm)	1	1	1	1	1	1	0.5	0.5	2.5

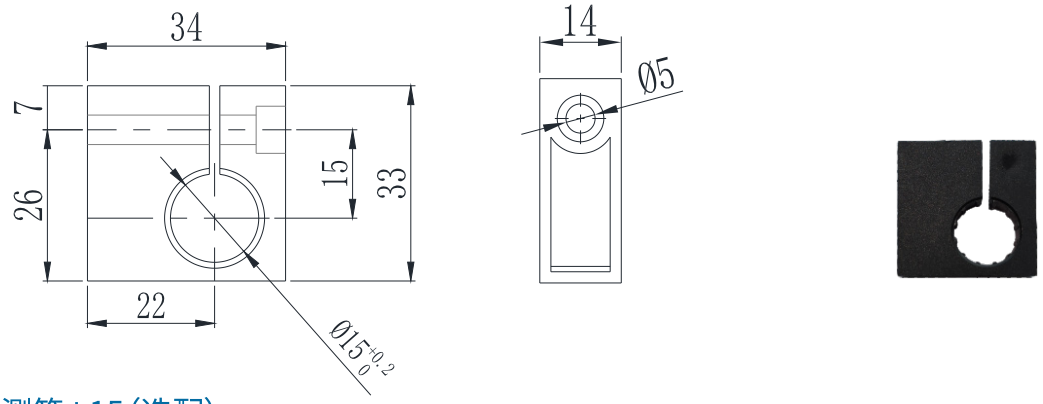
LVDT20/LVDT20-P回弹一体式-带防尘套-模拟量信号输出
LVDT20/LVDT20-P rebound one piece - with dust jacket - analog signal output

A型侧出线 A type lateral outlet

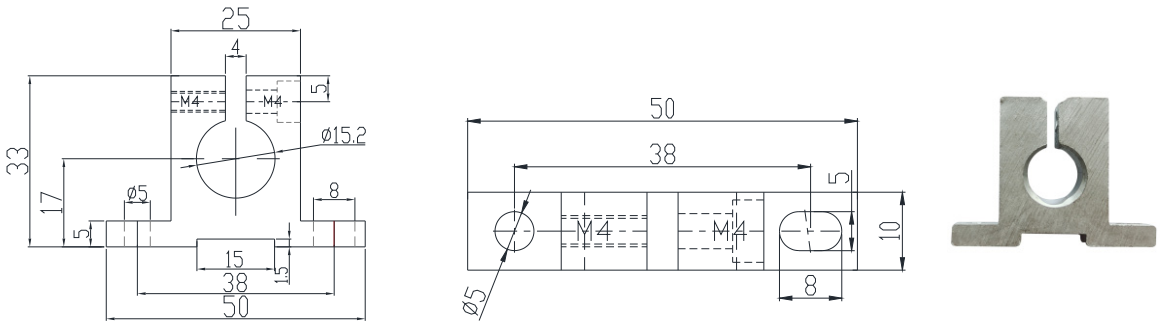


参数 parameters / 量程 range	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm
长度A (mm) length A (mm)	67	67	67	67	67	67	67	67	67
长度B (mm) length B (mm)	80	80	100	100	100	100	193	193	338
长度C (mm) length C (mm)	20	25	30	42	47	57	71	81	160
前后死区 (mm) front and rear dead zones (mm)	1	1	1	1	1	1	0.5	0.5	2.5

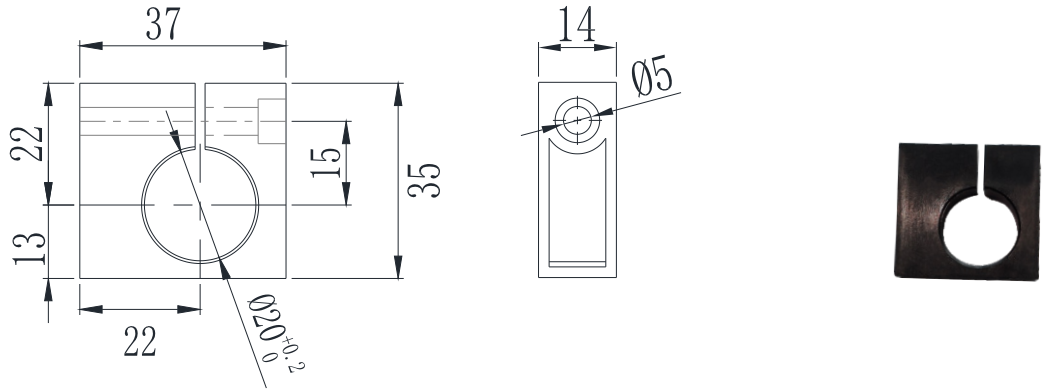
塑料安装支架-测笔φ15（默认）
plastic mounting bracket - stylus ϕ15 (default)



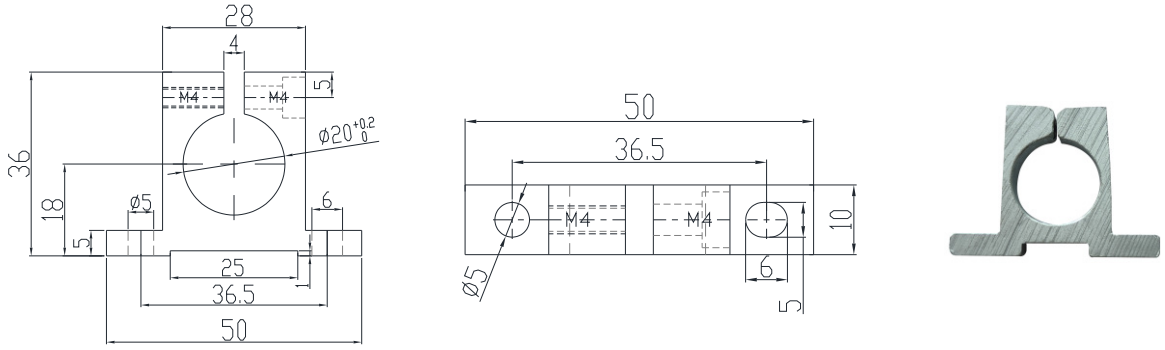
铝制安装支架-测笔φ15（选配）
aluminum mounting support - stylus ϕ15 (optional)



塑料安装支架-电子仓φ20（默认）
plastic mounting support - electronic silo ϕ20 (default)



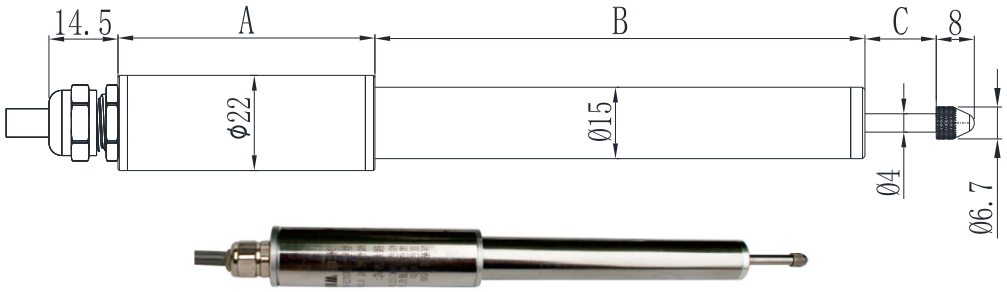
铝制安装支架-电子仓φ20（选配）
aluminum mounting support - electronic silo ϕ20 (optional)



产品尺寸图Product Dimension Drawing

LVDT20/LVDT20-P回弹一体式-不带防尘套-数字量信号输出
LVDT20/LVDT20-P rebound one piece - without dust jacket - digital signal output

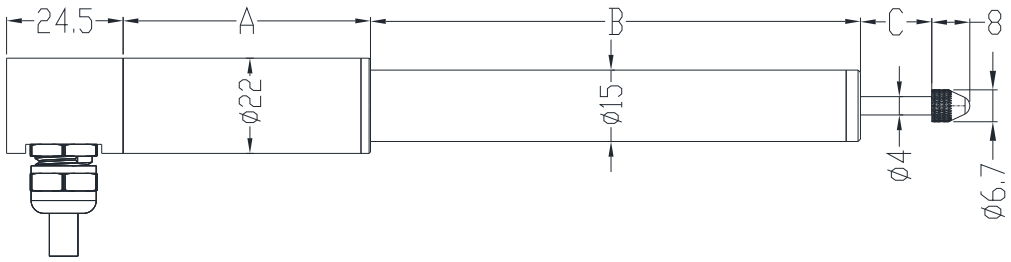
A型直出线 A type straight out line



参数 parameters / 量程 range	2mm	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm
长度A (mm) length A (mm)	79	79	79	79	79	79	79	79	79	79
长度B (mm) length B (mm)	51	80	80	100	100	100	100	193	193	338
长度C (mm) length C (mm)	3	7	12	17	22	27	32	41	51	105
前后死区 (mm) front and rear dead zones (mm)	0.5	1	1	1	1	1	1	0.5	0.5	2.5

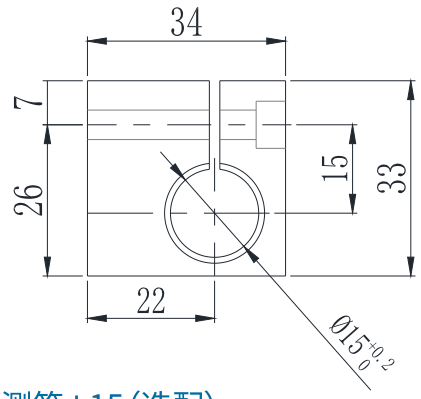
LVDT20/LVDT20-P回弹一体式-不带防尘套-数字量信号输出
LVDT20/LVDT20-P rebound one piece - without dust jacket - digital signal output

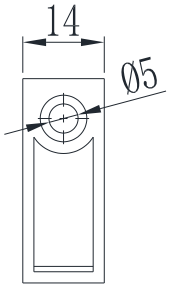
A型侧出线 A type lateral outlet



参数 parameters / 量程 range	2mm	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm
长度A (mm) length A (mm)	77	77	77	77	77	77	77	77	77	77
长度B (mm) length B (mm)	51	80	80	100	100	100	100	193	193	338
长度C (mm) length C (mm)	3	7	12	17	22	27	32	41	51	105
前后死区 (mm) front and rear dead zones (mm)	0.5	1	1	1	1	1	1	0.5	0.5	2.5

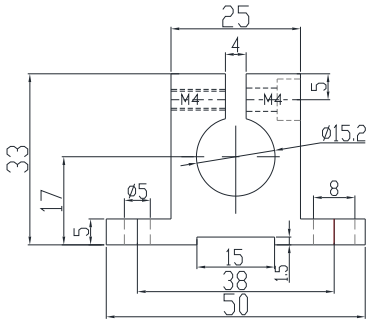
塑料安装支架-测笔φ15（默认）
plastic mounting bracket - stylus ϕ15 (default)

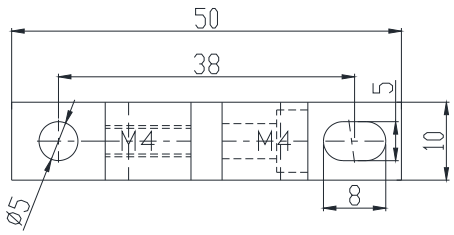






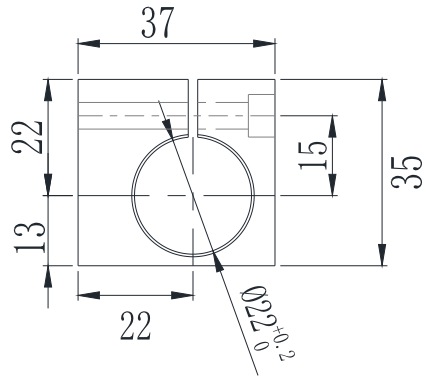
铝制安装支架-测笔φ15（选配）
aluminum mounting support - stylus ϕ15 (optional)

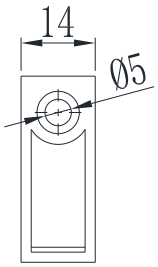






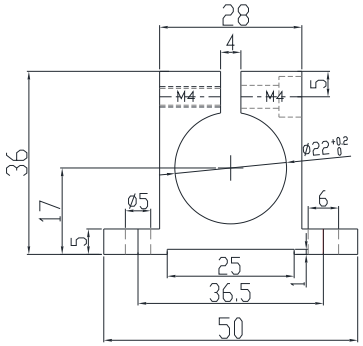
塑料安装支架-电子仓φ22（默认）
plastic mounting support - electronic silo ϕ22 (default)

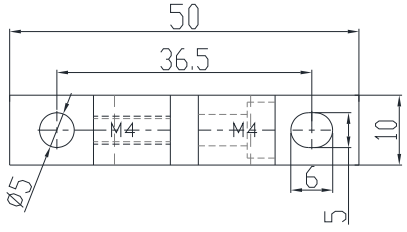






铝制安装支架-电子仓φ22（选配）
aluminum mounting support - electronic silo ϕ22 (optional)



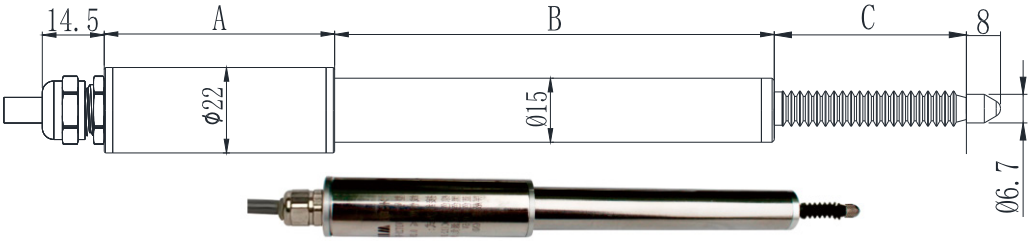




产品尺寸图Product Dimension Drawing

LVDT20/LVDT20-P回弹一体式-带防尘套-数字量信号输出
LVDT20/LVDT20-P rebound one piece - with dust jacket - digital signal output

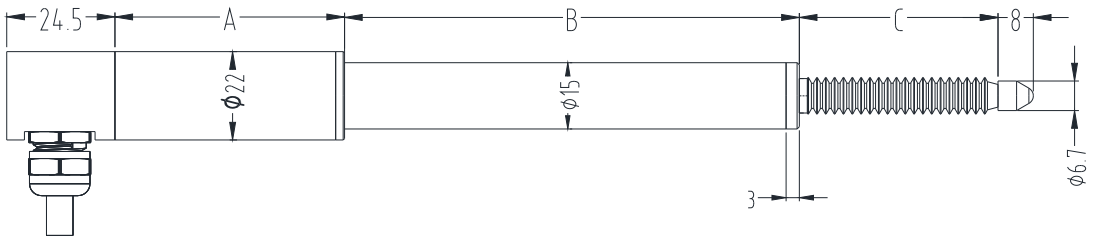
A型直出线 A type straight out line



参数 parameters / 量程 range	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm
长度A (mm) length A (mm)	79	79	79	79	79	79	79	79	79
长度B (mm) length B (mm)	80	80	100	100	100	100	193	193	338
长度C (mm) length C (mm)	20	25	30	42	47	57	71	81	160
前后死区 (mm) front and rear dead zones (mm)	1	1	1	1	1	1	0.5	0.5	2.5

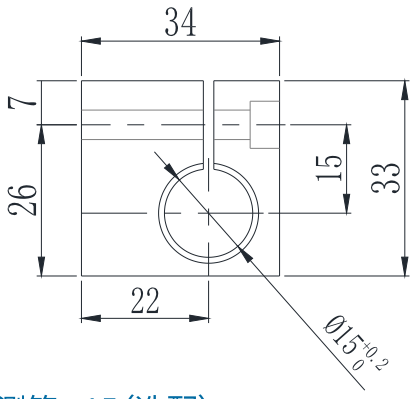
LVDT20/LVDT20-P回弹一体式-带防尘套-数字量信号输出
LVDT20/LVDT20-P rebound one piece - with dust jacket - digital signal output

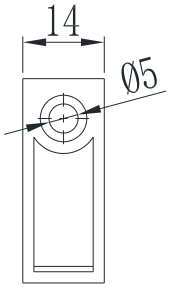
A型侧出线 A type lateral outlet



参数 parameters / 量程 range	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm
长度A (mm) length A (mm)	77	77	77	77	77	77	77	77	77
长度B (mm) length B (mm)	80	80	100	100	100	100	193	193	338
长度C (mm) length C (mm)	20	25	30	42	47	57	71	81	160
前后死区 (mm) front and rear dead zones (mm)	1	1	1	1	1	1	0.5	0.5	2.5

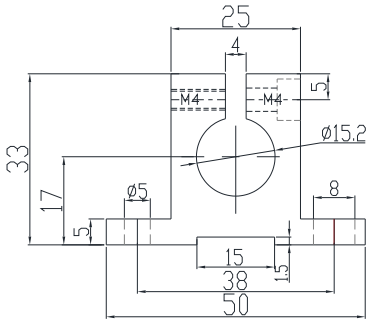
塑料安装支架-测笔φ15（默认）
plastic mounting bracket - stylus ϕ15 (default)

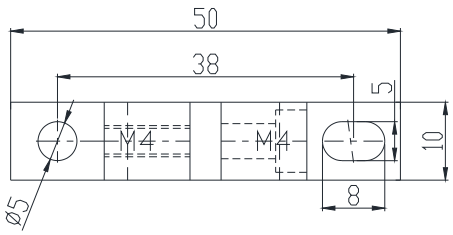






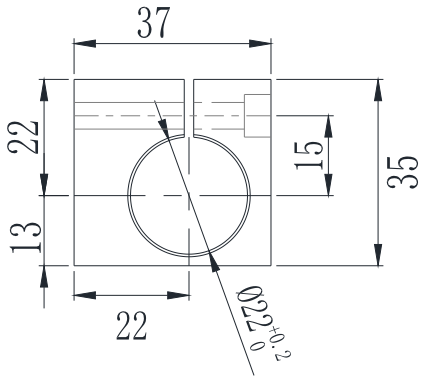
铝制安装支架-测笔φ15（选配）
aluminum mounting support - stylus ϕ15 (optional)

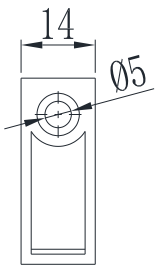






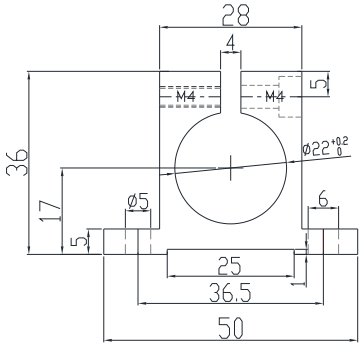
塑料安装支架-电子仓φ22（默认）
plastic mounting support - electronic silo ϕ22 (default)

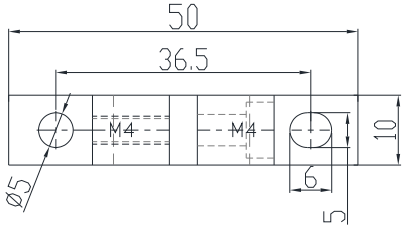






铝制安装支架-电子仓φ22（选配）
aluminum mounting support - electronic silo ϕ22 (optional)



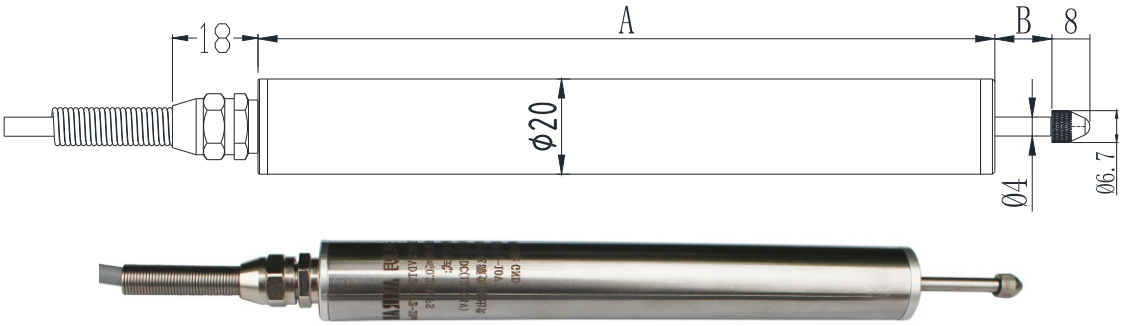




产品尺寸图Product Dimension Drawing

LVDT20/LVDT20-P回弹一体式-不带防尘套-模拟量信号输出
LVDT20/LVDT20-P rebound one piece - without dust jacket - analog signal output

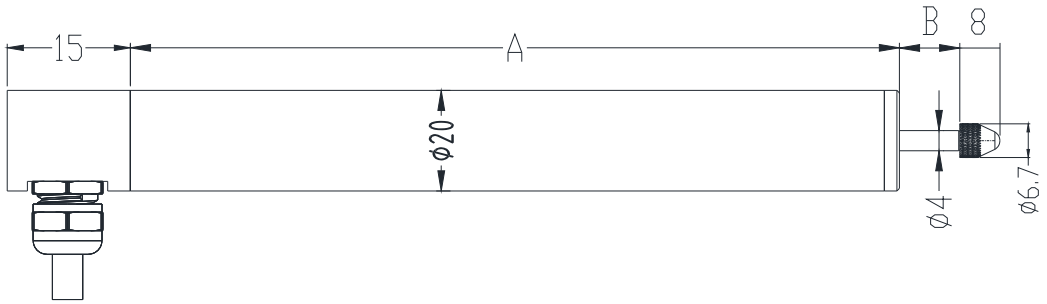
B型直出线 B type straight out line



参数 parameters / 量程 range	2mm	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm
长度A (mm) length A (mm)	113	140	140	155	155	155	155	260	260	395
长度B (mm) length B (mm)	3	7	12	17	22	27	32	41	51	105
前后死区(mm) front and rear dead zones (mm)	0.5	1	1	1	1	1	1	0.5	0.5	2.5

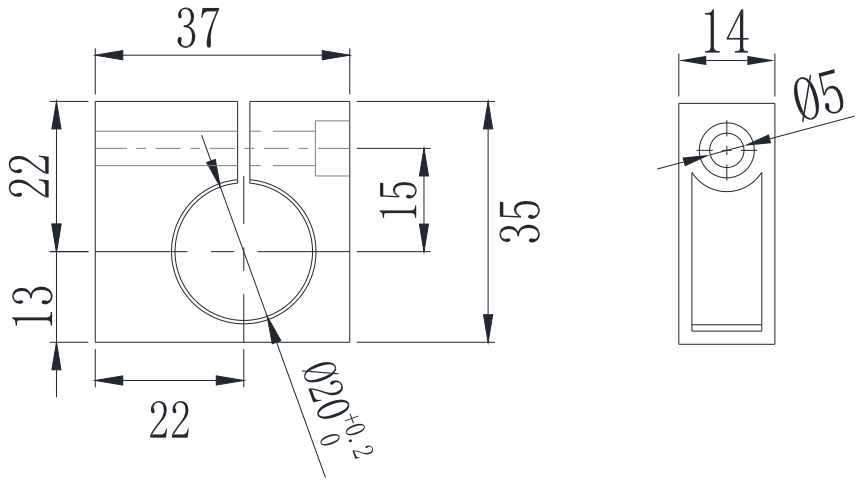
LVDT20/LVDT20-P回弹一体式-不带防尘套-模拟量信号输出
LVDT20/LVDT20-P rebound one piece - without dust jacket - analog signal output

B型侧出线 B type lateral outlet



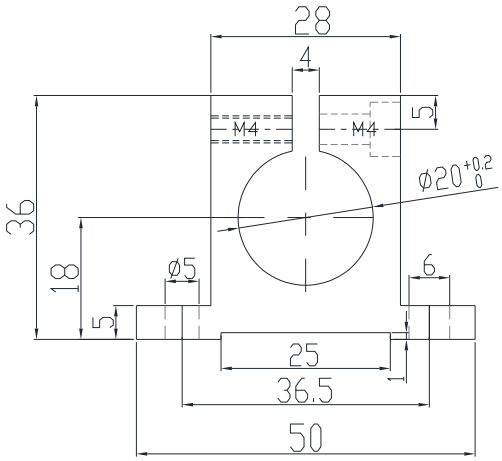
参数 parameters / 量程 range	2mm	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm
长度A (mm) length A (mm)	111	138	138	153	153	153	153	258	258	393
长度B (mm) length B (mm)	3	7	12	17	22	27	32	41	51	105
前后死区 (mm) front and rear dead zones	0.5	1	1	1	1	1	1	0.5	0.5	2.5

塑料安装支架-电子仓φ20（默认）
plastic mounting support - electronic silo φ20 (default)

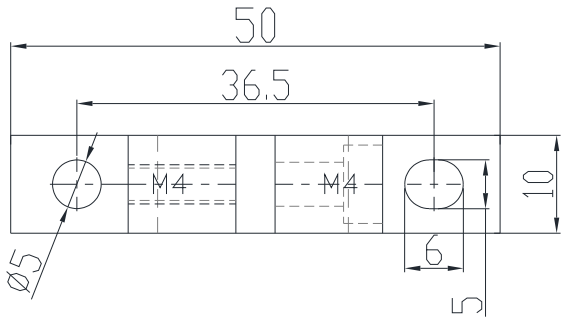




铝制安装支架-电子仓φ20（选配）
aluminum mounting support - electronic silo φ20 (optional)



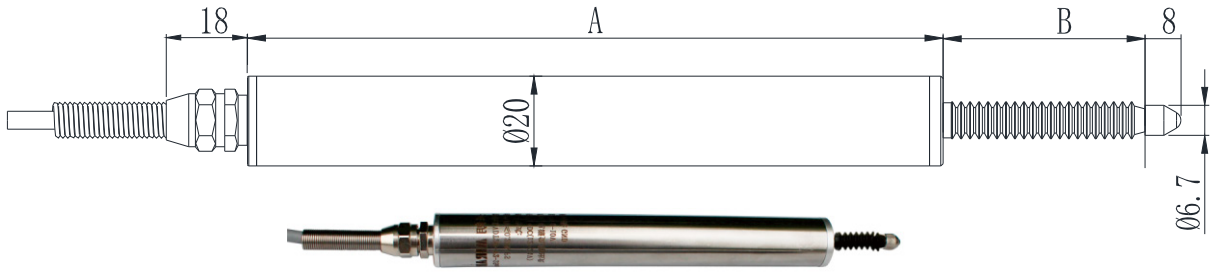




产品尺寸图Product Dimension Drawing

LVDT20/LVDT20-P回弹一体式-带防尘套-模拟量信号输出
LVDT20/LVDT20-P rebound one piece - with dust jacket - analog signal output

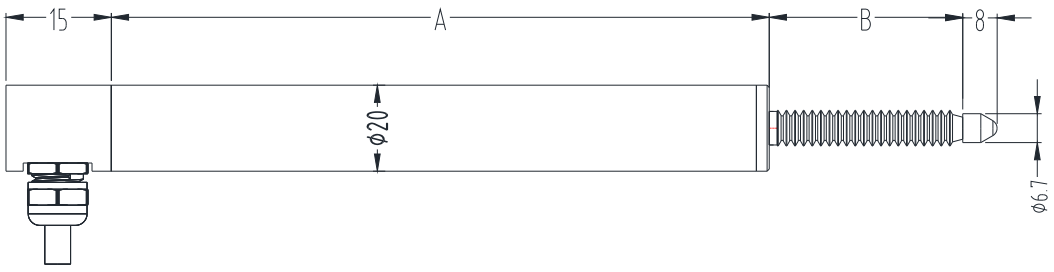
B型直出线 B type straight out line



参数 parameters / 量程 range	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm
长度A (mm) length A (mm)	140	140	155	155	155	155	260	260	395
长度B (mm) length B (mm)	20	25	30	42	47	57	71	81	160
前后死区(mm) front and rear dead zones (mm)	1	1	1	1	1	1	0.5	0.5	2.5

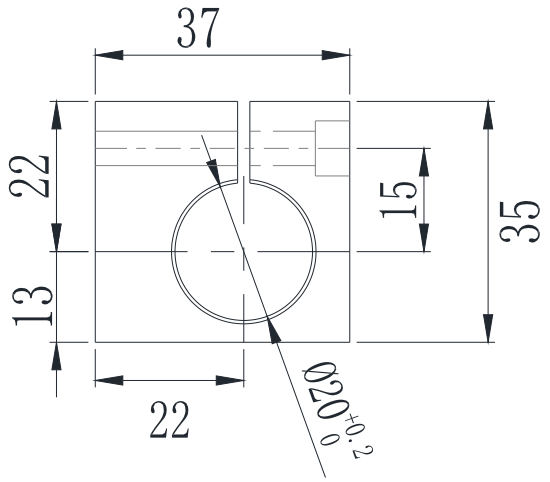
LVDT20/LVDT20-P回弹一体式-带防尘套-模拟量信号输出
LVDT20/LVDT20-P rebound one piece - with dust jacket - analog signal output

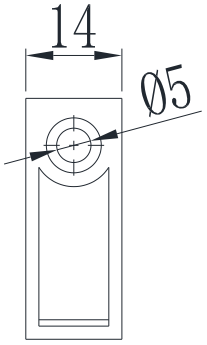
B型侧出线 B type lateral outlet



参数 parameters / 量程 range	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm
长度A (mm) length A (mm)	138	138	153	153	153	153	258	258	393
长度B (mm) length B (mm)	20	25	30	42	47	57	71	81	160
前后死区(mm) front and rear dead zones (mm)	1	1	1	1	1	1	0.5	0.5	2.5

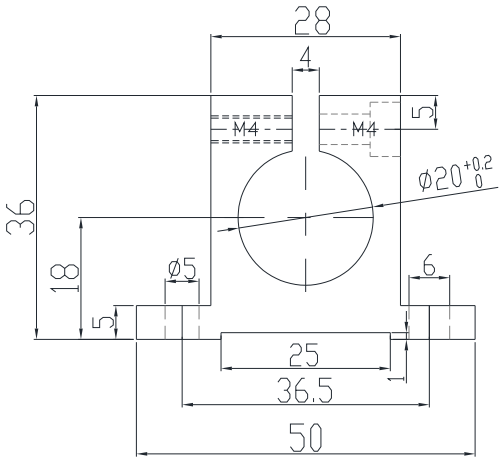
塑料安装支架-电子仓φ20（默认）
plastic mounting support - electronic silo φ20 (default)



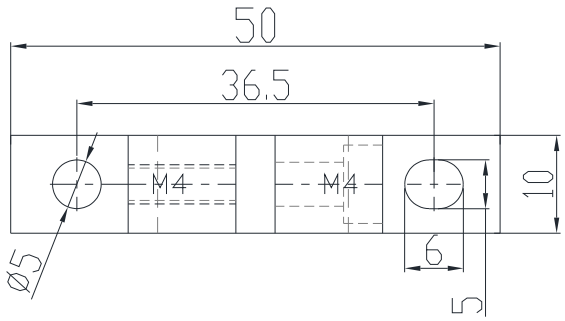




铝制安装支架-电子仓φ20（选配）
aluminum mounting support - electronic silo φ20 (optional)



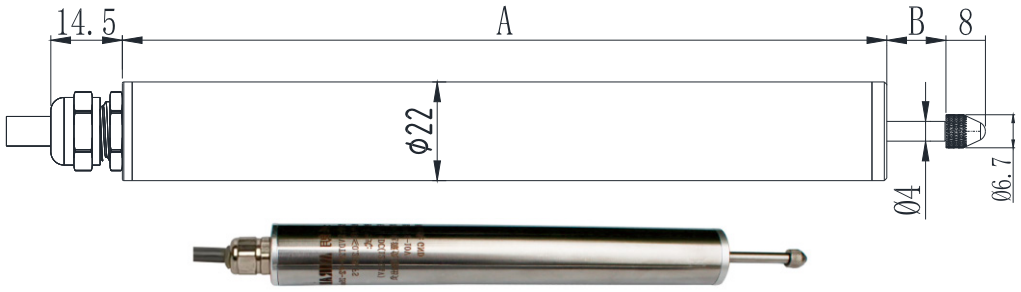




产品尺寸图Product Dimension Drawing

LVDT20/LVDT20-P回弹一体式-不带防尘套-数字量信号输出
LVDT20/LVDT20-P rebound one piece - without dust jacket - digital signal output

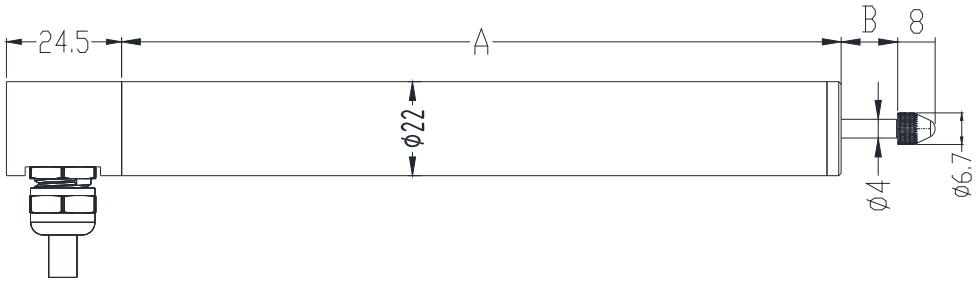
B型直出线 B type straight out line



参数 parameters / 量程 range	2mm	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm
长度A (mm) length A (mm)	123	150	150	170	170	170	170	270	270	405
长度B (mm) length B (mm)	3	7	12	17	22	27	32	41	51	105
前后死区(mm) front and rear dead zones (mm)	0.5	1	1	1	1	1	1	0.5	0.5	2.5

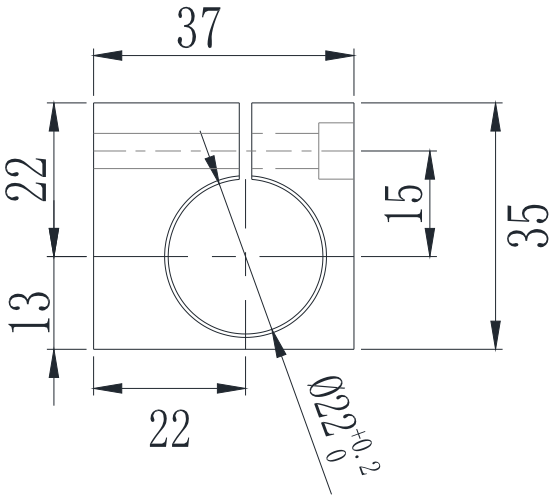
LVDT20/LVDT20-P回弹一体式-不带防尘套-数字量信号输出
LVDT20/LVDT20-P rebound one piece - without dust jacket - digital signal output

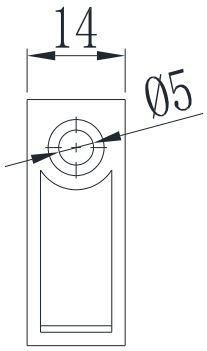
B型侧出线 B type lateral outlet



参数 parameters / 量程 range	2mm	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm
长度A (mm) length A (mm)	121	148	148	168	168	168	168	268	268	403
长度B (mm) length B (mm)	3	7	12	17	22	27	32	41	51	105
前后死区(mm) front and rear dead zones (mm)	0.5	1	1	1	1	1	1	0.5	0.5	2.5

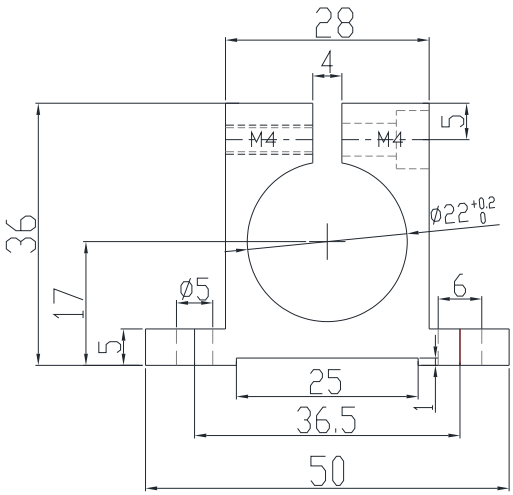
塑料安装支架-电子仓φ22（默认）
plastic mounting support - electronic silo φ22 (default)



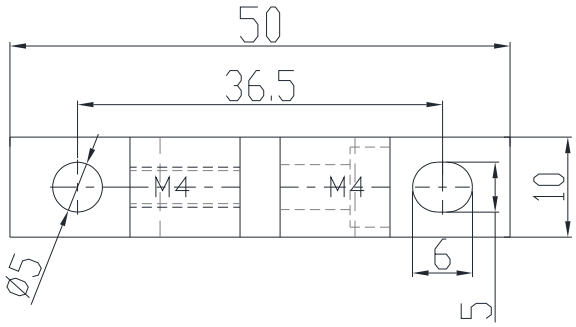




铝制安装支架-电子仓φ22（选配）
aluminum mounting support - electronic silo φ22 (optional)



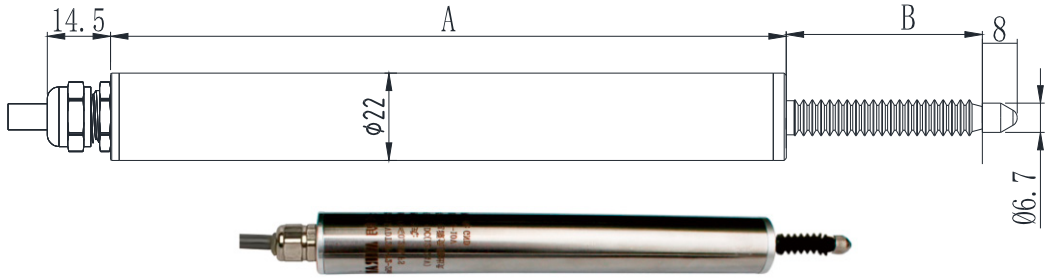




产品尺寸图Product Dimension Drawing

LVDT20/LVDT20-P回弹一体式-带防尘套-数字量信号输出
LVDT20/LVDT20-P rebound one piece - with dust jacket - digital signal output

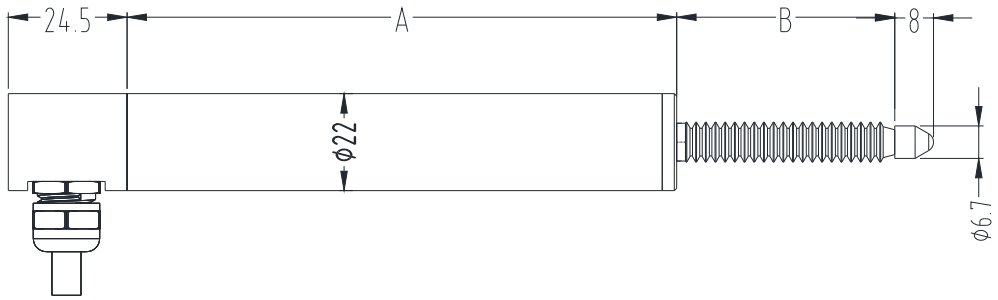
B型直出线 B type straight out line



参数 parameters / 量程 range	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm
长度A (mm) length A (mm)	150	150	170	170	170	170	270	270	405
长度B (mm) length B (mm)	20	25	30	42	47	57	71	81	160
前后死区(mm) front and rear dead zones (mm)	1	1	1	1	1	1	0.5	0.5	2.5

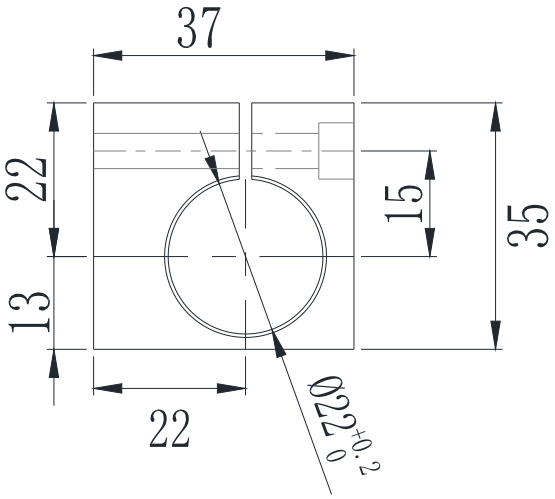
LVDT20/LVDT20-P回弹一体式-带防尘套-数字量信号输出
LVDT20/LVDT20-P rebound one piece - with dust jacket - digital signal output

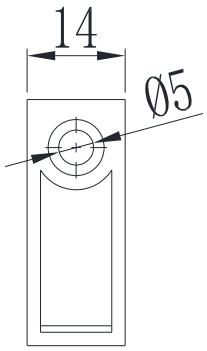
B型侧出线 B type lateral outlet



参数 parameters / 量程 range	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm
长度A (mm) length A (mm)	148	148	168	168	168	168	268	268	403
长度B (mm) length B (mm)	20	25	30	42	47	57	71	81	160
前后死区(mm) front and rear dead zones (mm)	1	1	1	1	1	1	0.5	0.5	2.5

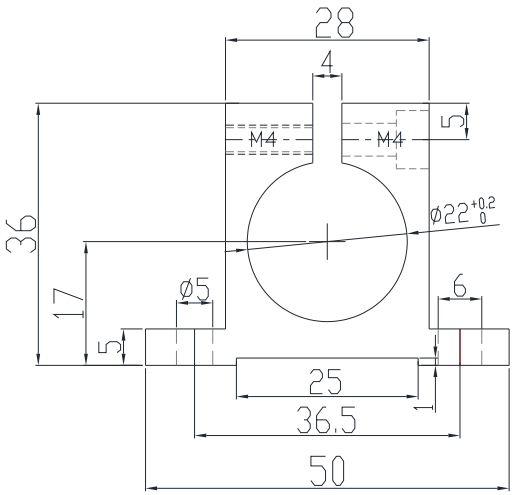
塑料安装支架-电子仓φ22（默认）
plastic mounting support - electronic silo φ22 (default)



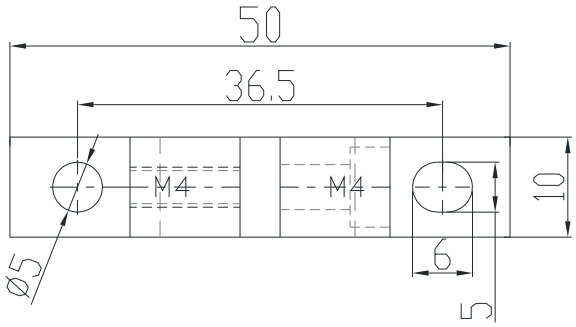




铝制安装支架-电子仓φ22（选配）
aluminum mounting support - electronic silo φ22 (optional)



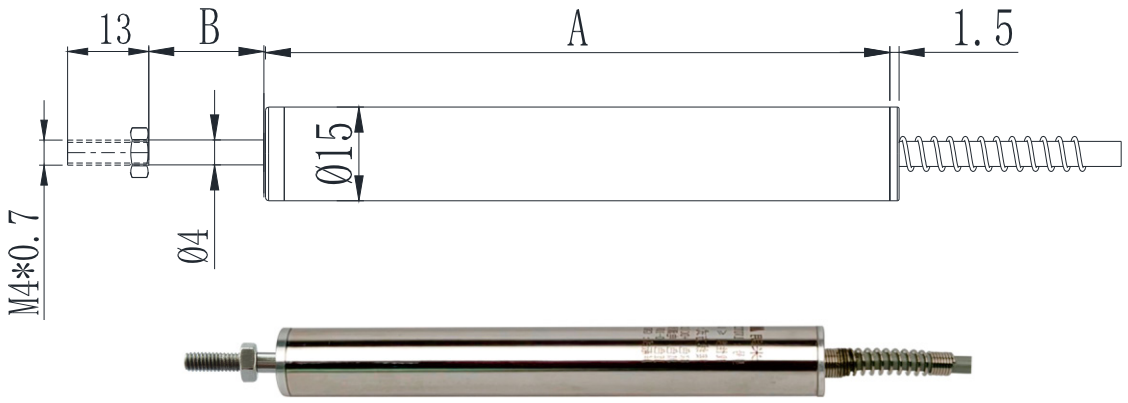




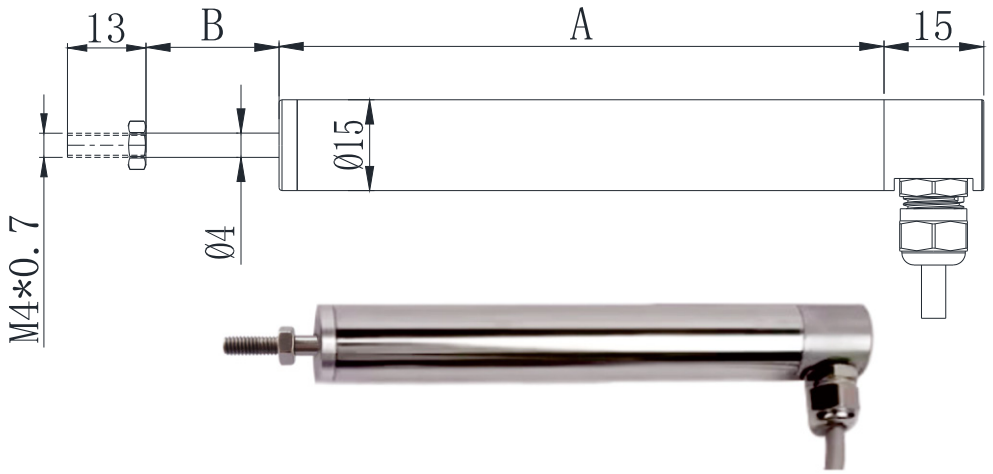
产品尺寸图Product Dimension Drawing

LVDTC20/LVDTC20-P拉杆分体式-测笔
LVDTC20/LVDTC20-P tie rod split - stylus

直出线direct line



侧出线lateral outlet

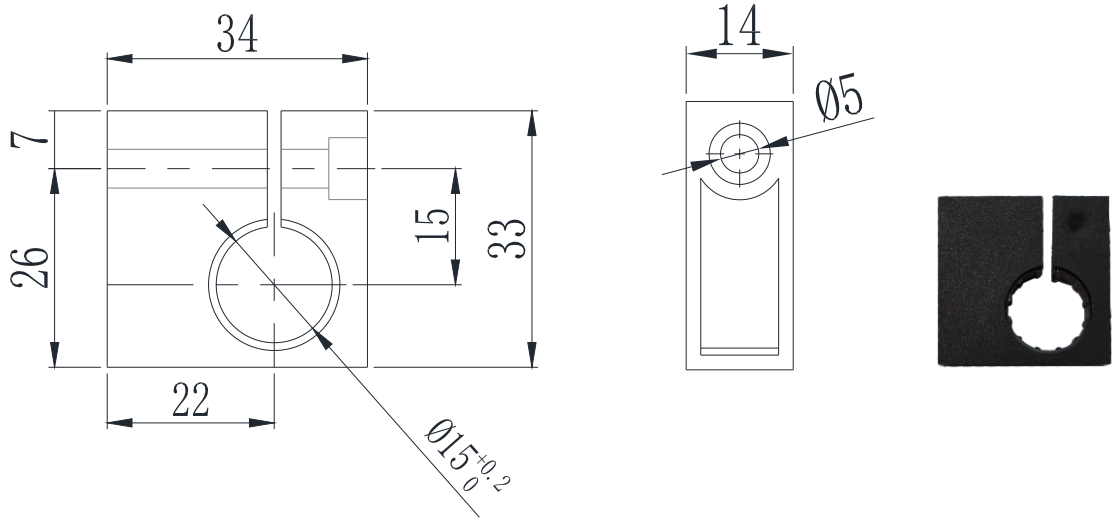


参数 parameters / 量程 range	2mm	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm	200mm
长度A (mm) length A (mm)	51	80	80	100	100	100	100	193	193	338	491
长度B (mm) length B (mm)	3	7	12	17	22	27	32	41	51	105	202
前后死区 (mm) front and rear dead zones	0.5	1	1	1	1	1	1	0.5	0.5	2.5	1

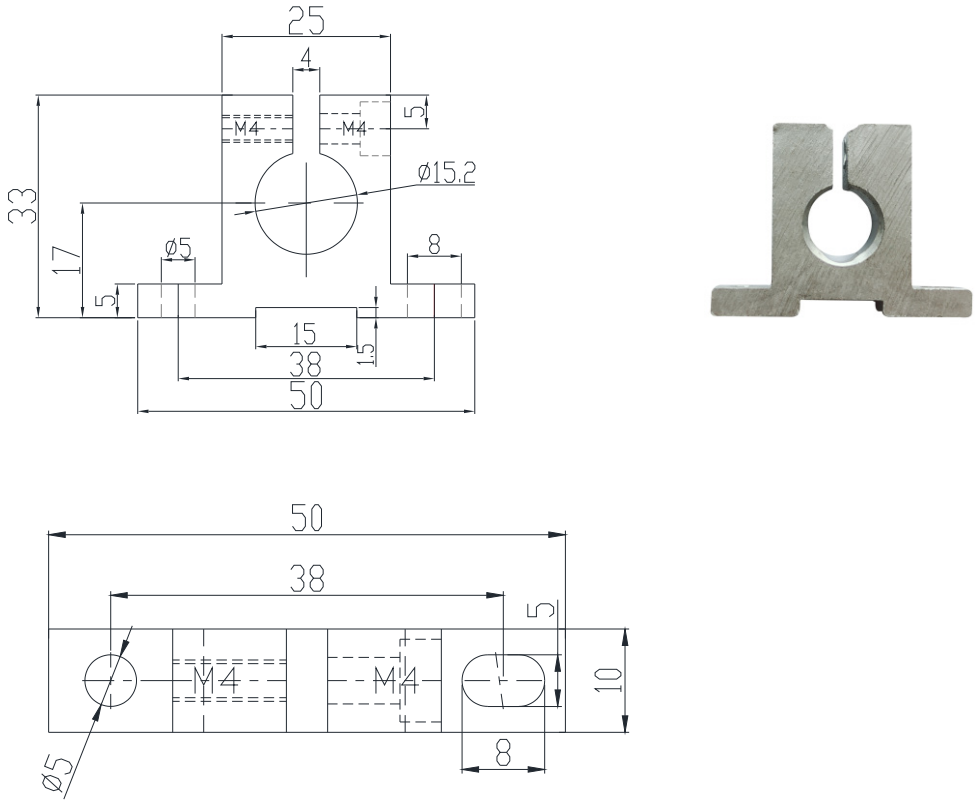
注:回弹分离式需要选型测笔和电子仓,拉杆式、回弹一体式的测笔和电子仓是一体的,不需要再选择电子仓。

Note: Separate rebound requires the selection of a stylus and electronic compartment, while the stylus and electronic compartment of the pull-rod and rebound all-in-one models are integrated and do not require the selection of an electronic compartment.

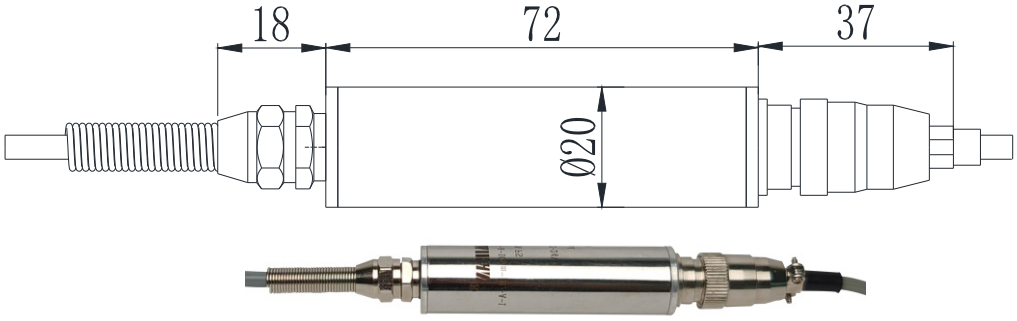
塑料安装支架-测笔ϕ15（默认）
plastic mounting support - stylus ϕ15 (default)



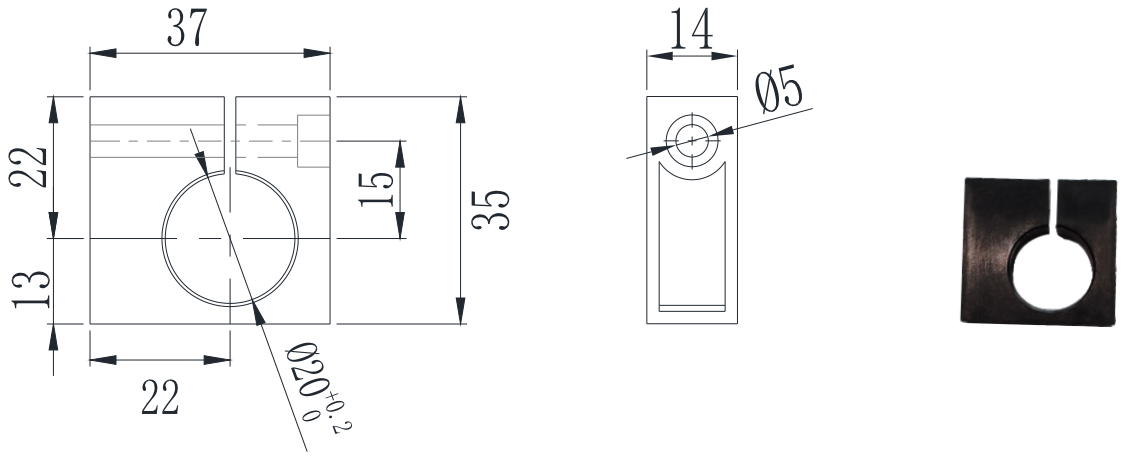
铝制安装支架-测笔ϕ15（选配）
aluminum mounting support - stylus ϕ15 (optional)



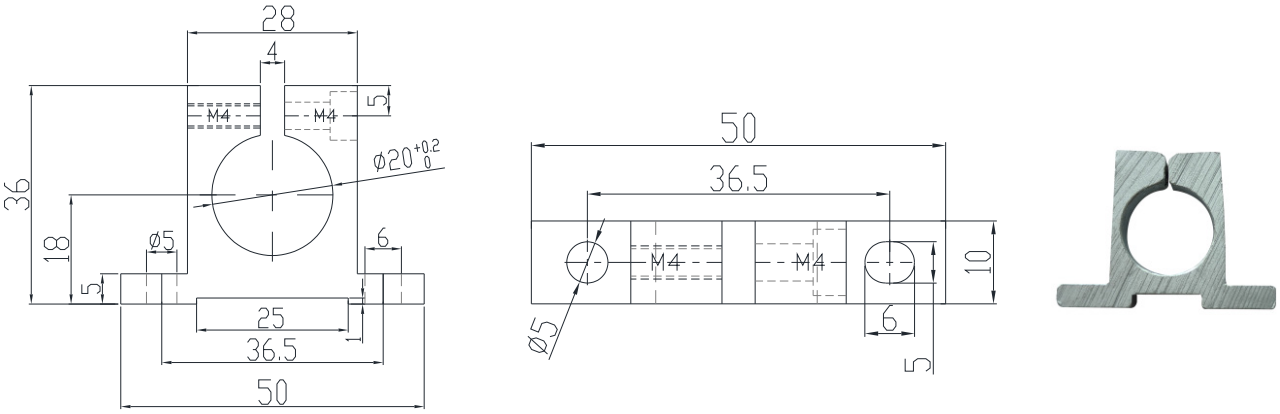
A型电子仓(模拟量)
Type A electronic silo (analog)



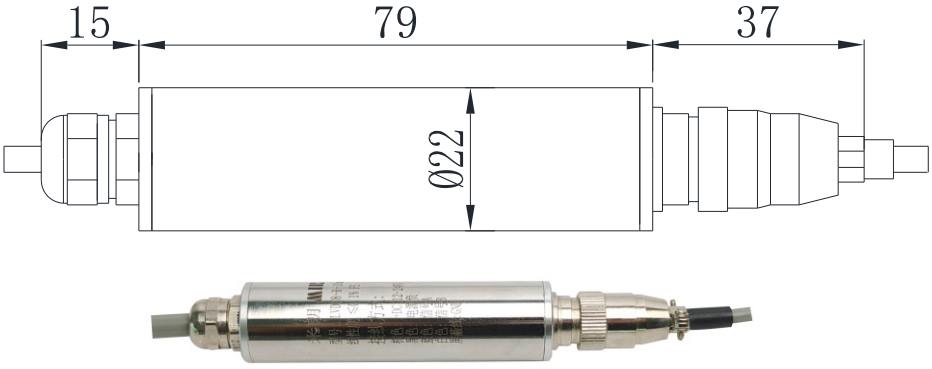
塑料安装支架-电子仓φ20(默认)
plastic mounting support - electronic silo φ20 (default)



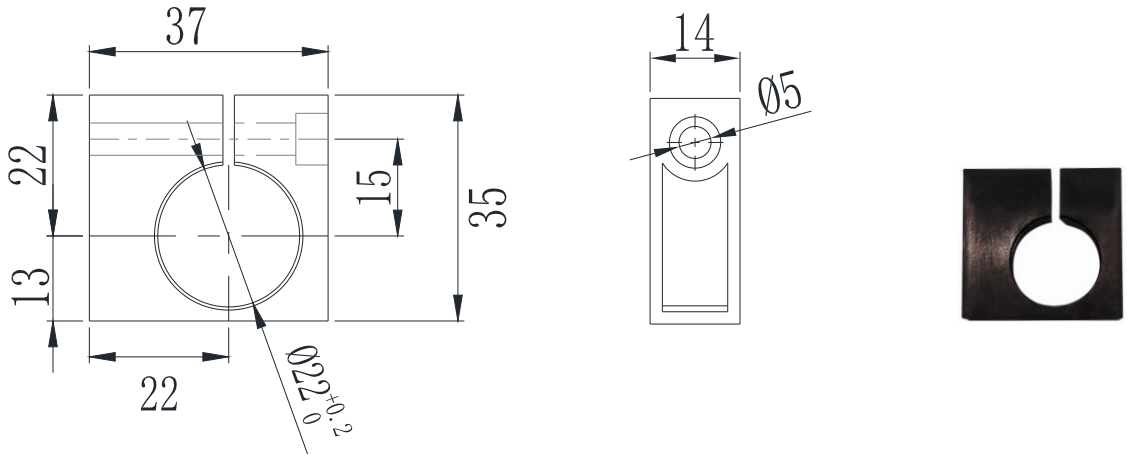
铝制安装支架-电子仓φ20(选配)
aluminum mounting support - electronic silo φ20 (optional)



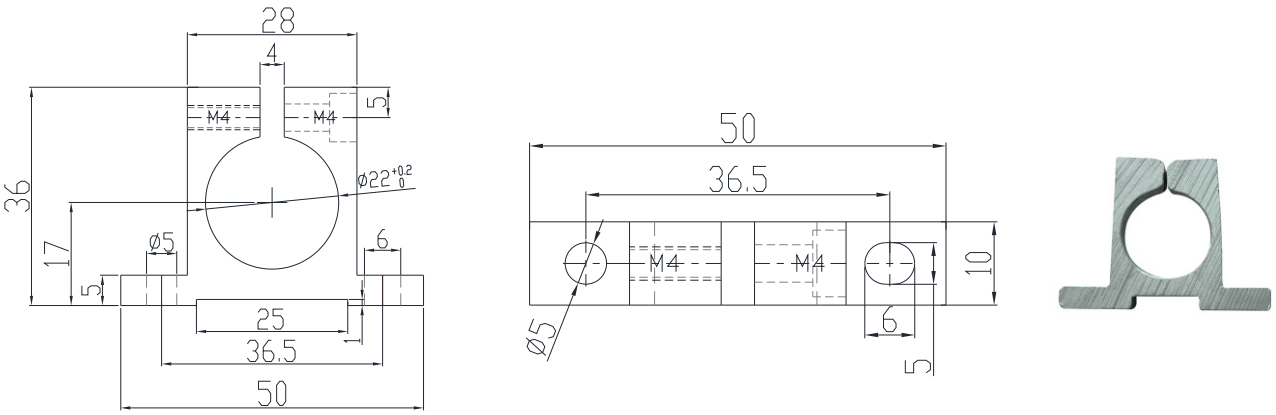
A型电子仓（数字量）
Type A electronic silo (digital)



塑料安装支架-电子仓ϕ22（默认）
plastic mounting support - electronic silo ϕ22 (default)



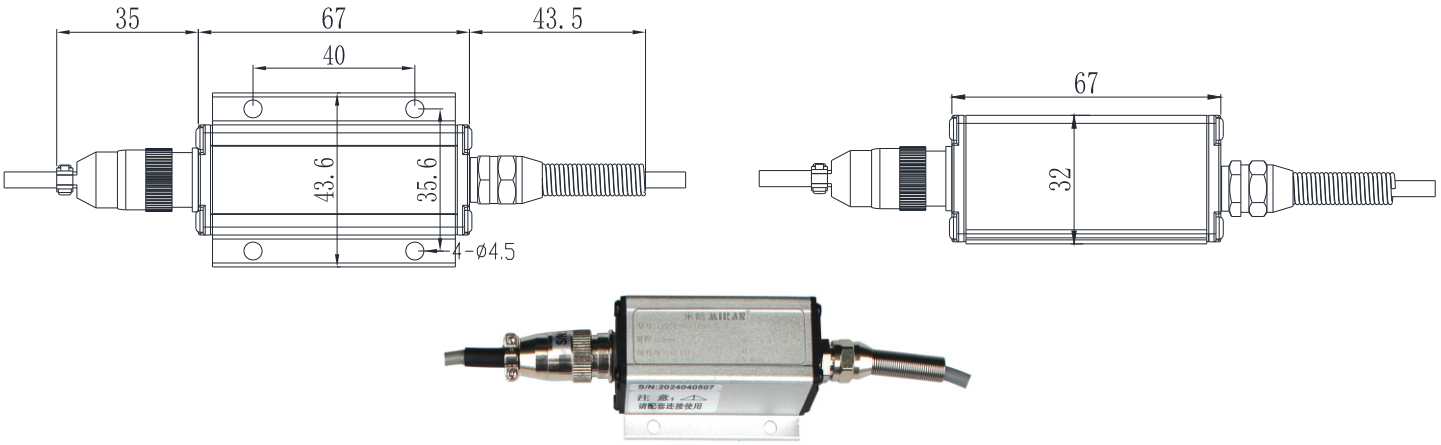
铝制安装支架-电子仓ϕ22（选配）
aluminum mounting support - electronic silo ϕ22 (optional)



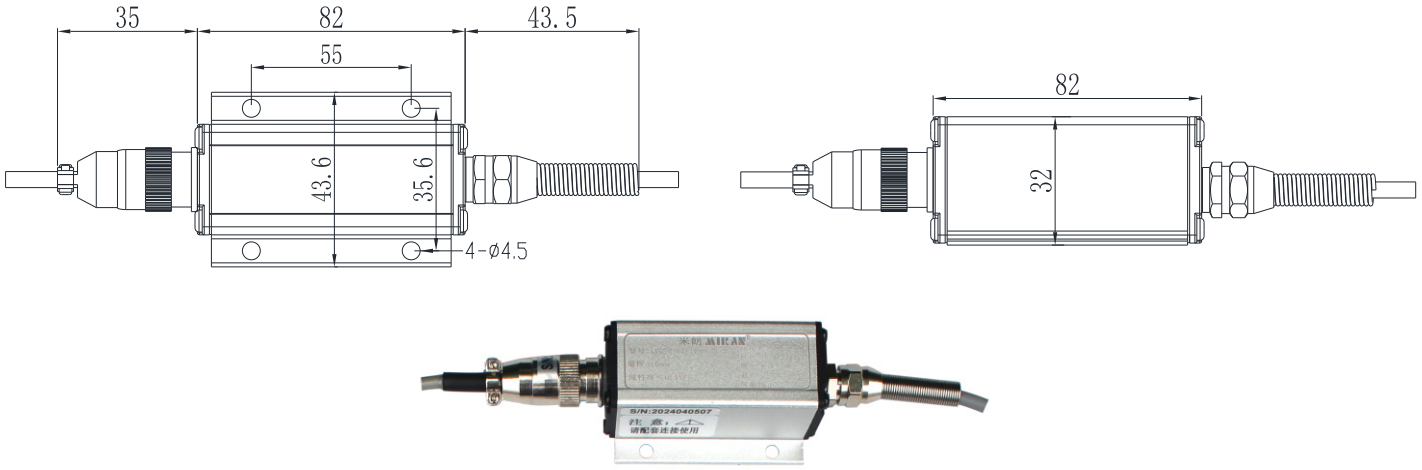
B型电子仓
Type B electronic warehouse

新款B型电子仓(默认)
New type B electronic silo (default)

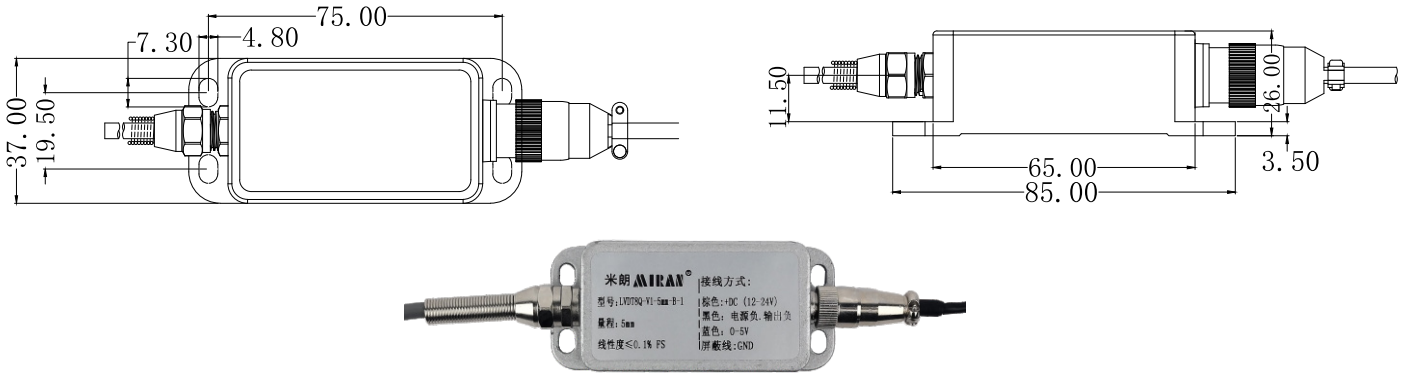
模拟量信号
Analog signal



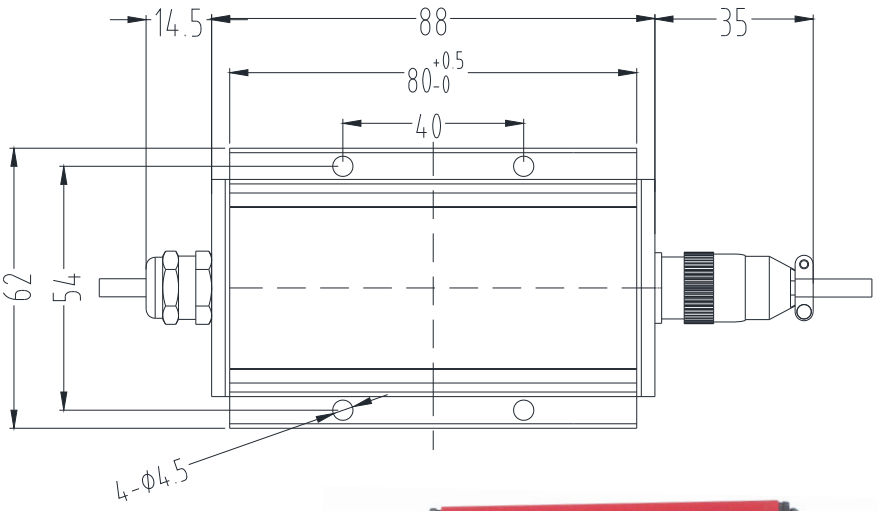
数字量信号
Digital signal

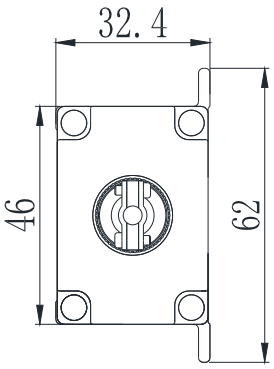


旧款B型电子仓(可选)
old type B electronic silo (optional)



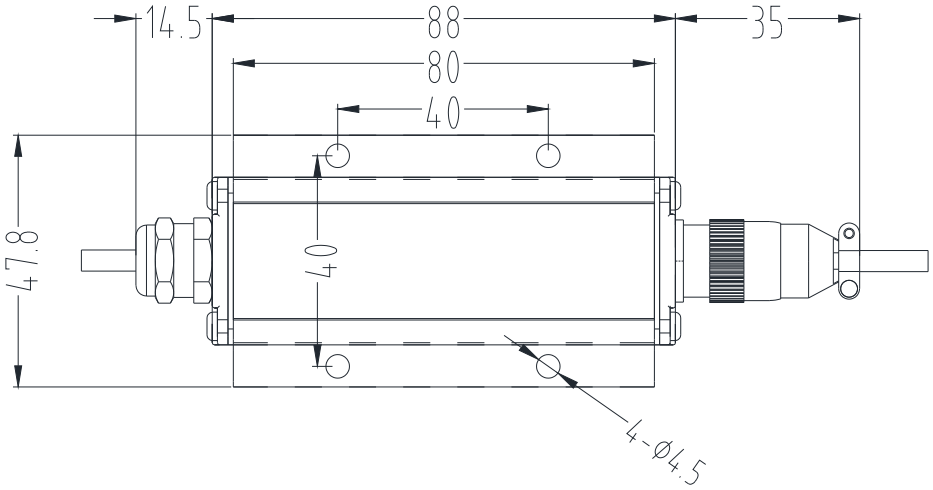
四线制C型电子仓Four-wire C-type electronic warehouse

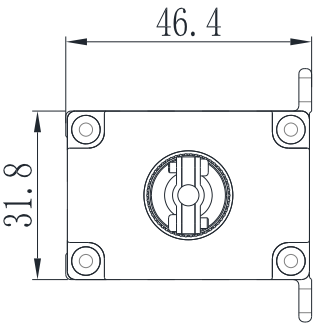






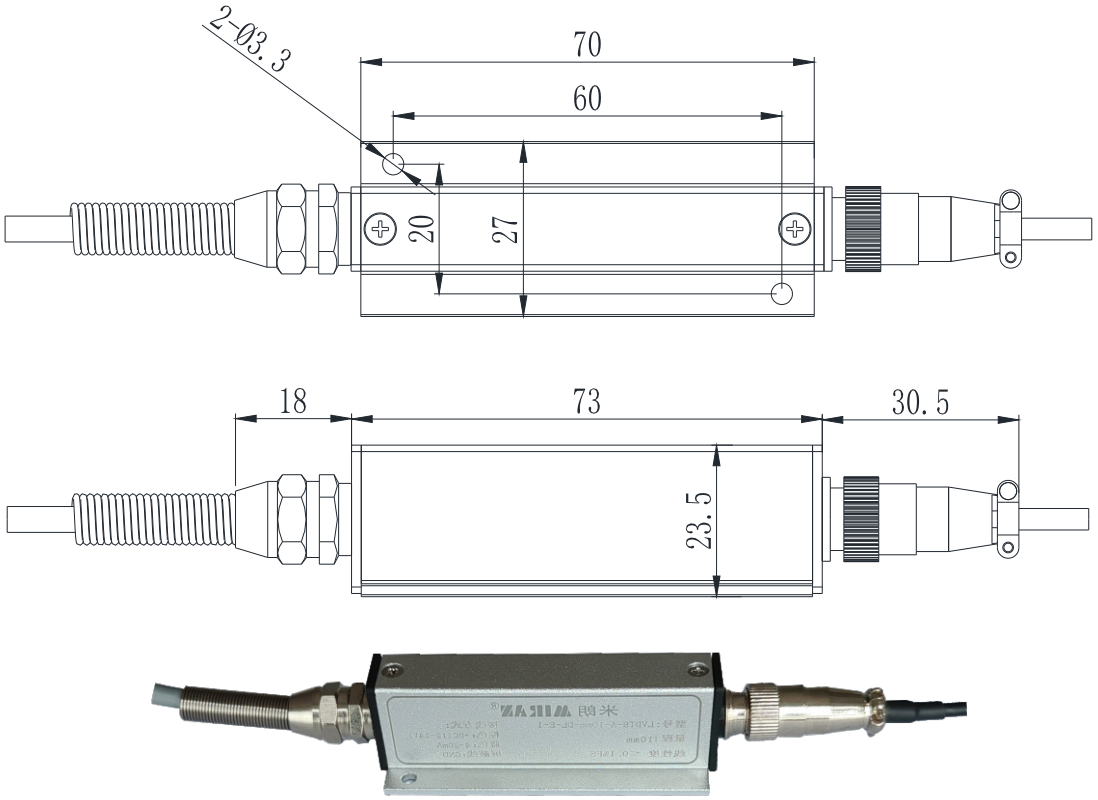
四线制D型电子仓Four-wire D-type electronic warehouse



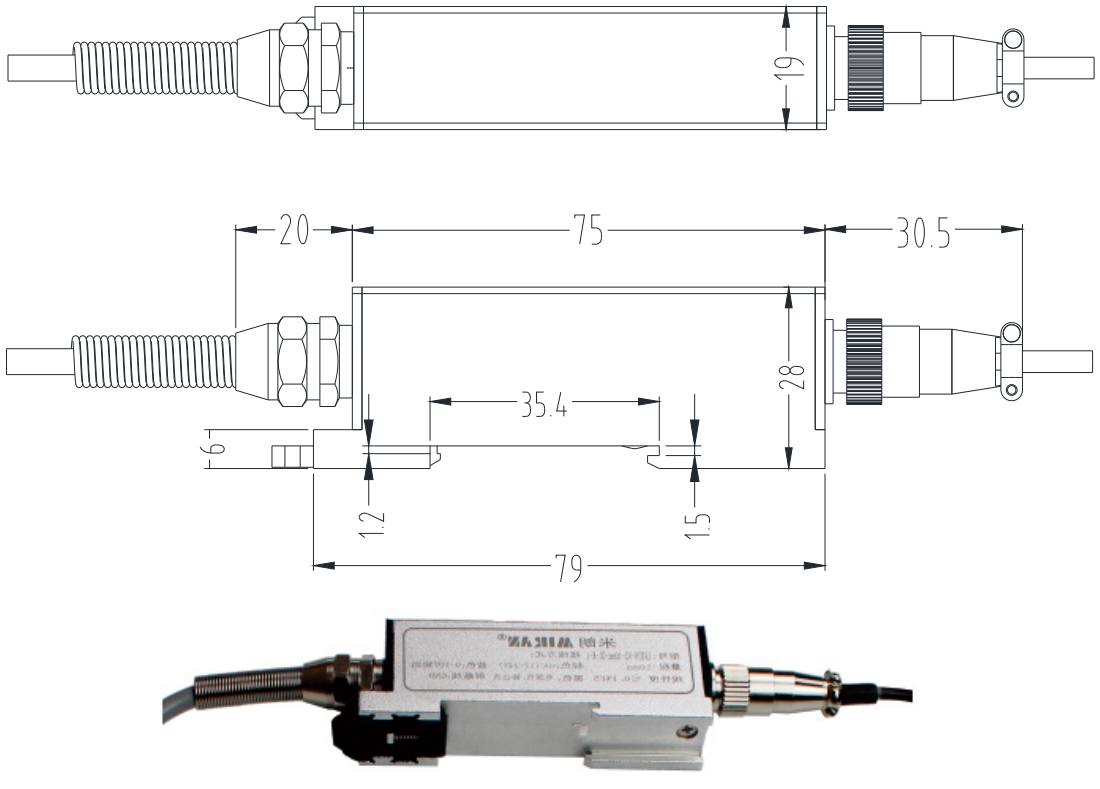




E型带耳安装式电子仓
E-type with ear-mounted electronic compartment



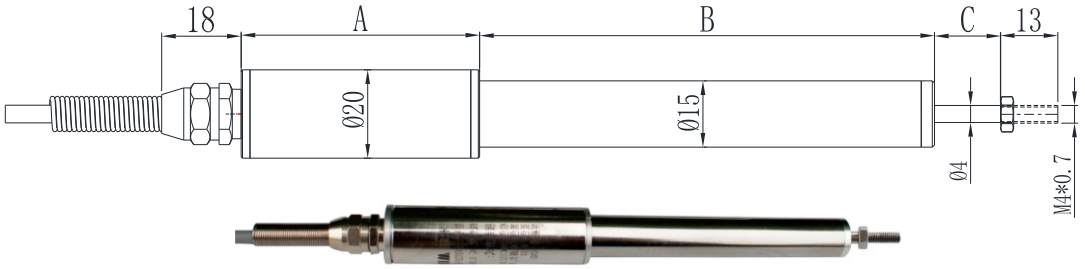
K型导轨卡扣式电子仓
K-rail snap-on electronic bin



产品尺寸图Product Dimension Drawing

LVDTC20/LVDTC20-P拉杆一体式-模拟信号输出
LVDTC20/LVDTC20-P tie rod integral - analog signal outputs

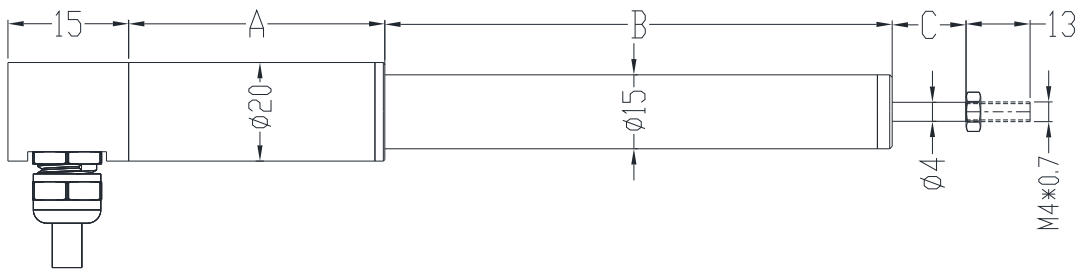
A型直出线 A type straight out line



参数 parameters / 量程 range	2mm	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm	200mm
长度A (mm) length A (mm)	69	69	69	69	69	69	69	69	69	69	69
长度B (mm) length B (mm)	51	80	80	100	100	100	100	193	193	338	491
长度C (mm) length C (mm)	3	7	12	17	22	27	32	41	51	105	202
前后死区 (mm) front and rear dead zones	0.5	1	1	1	1	1	1	0.5	0.5	2.5	1

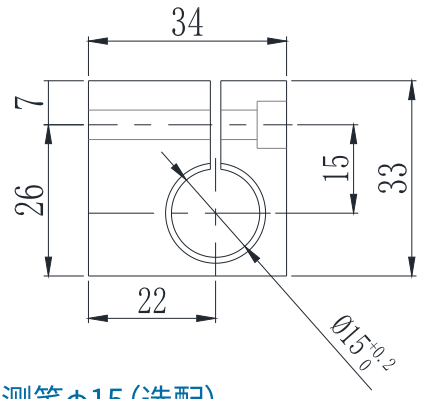
LVDTC20/LVDTC20-P拉杆一体式-模拟信号输出
LVDTC20/LVDTC20-P tie rod integral - analog signal outputs

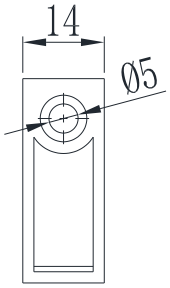
A型侧出线 A type lateral outlet



参数 parameters / 量程 range	2mm	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm	200mm
长度A (mm) length A (mm)	67	67	67	67	67	67	67	67	67	67	67
长度B (mm) length B (mm)	51	80	80	100	100	100	100	193	193	338	491
长度C (mm) length C (mm)	3	7	12	17	22	27	32	41	51	105	202
前后死区 (mm) front and rear dead zones	0.5	1	1	1	1	1	1	0.5	0.5	2.5	1

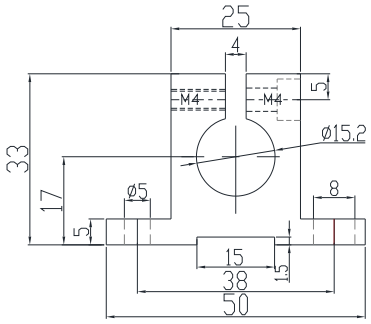
塑料安装支架-测笔φ15（默认）
plastic mounting bracket - stylus ϕ15 (default)

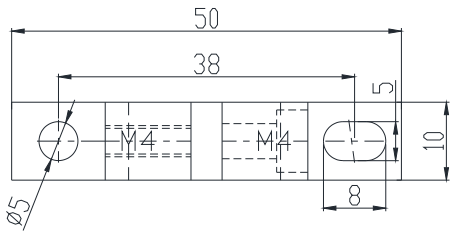






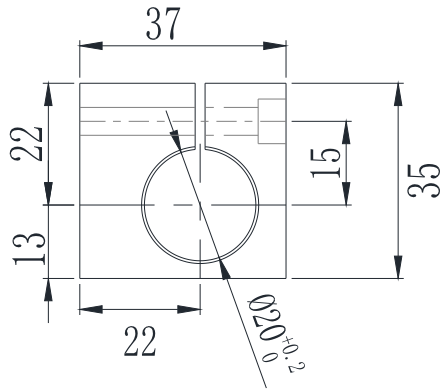
铝制安装支架-测笔φ15（选配）
aluminum mounting support - stylus ϕ15 (optional)

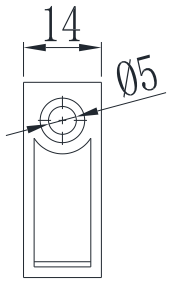






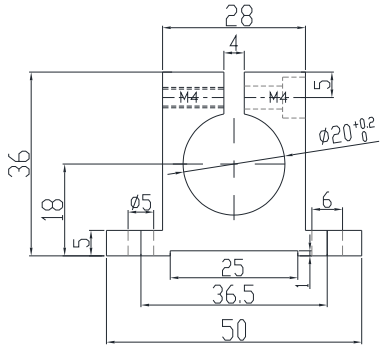
塑料安装支架-电子仓φ20（默认）
plastic mounting support - electronic silo ϕ20 (default)

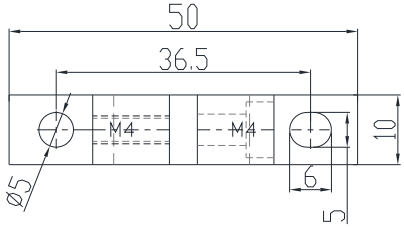






铝制安装支架-电子仓φ20（选配）
aluminum mounting support - electronic silo ϕ20 (optional)



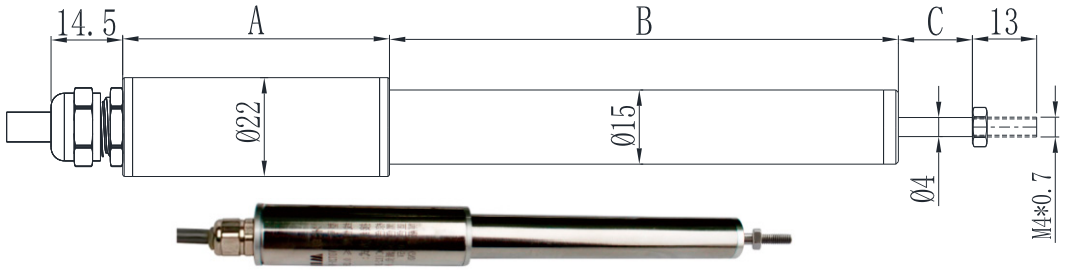




产品尺寸图Product Dimension Drawing

LVDTC20/LVDTC20-P拉杆一体式-数字信号输出
LVDTC20/LVDTC20-P tie rod integral - digital signal output

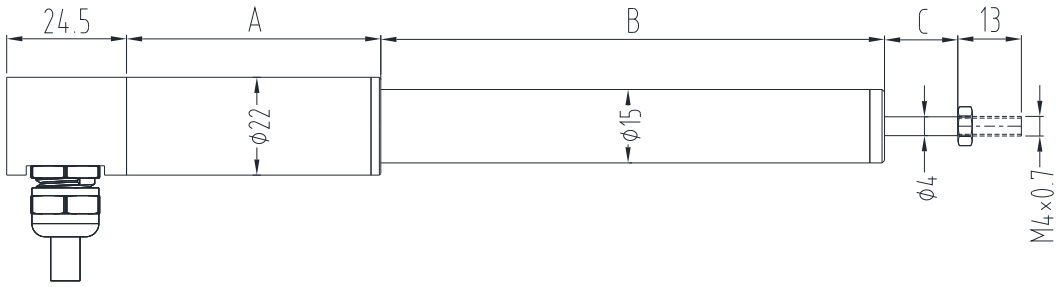
A型直出线 A type straight out line



参数 parameters / 量程 range	2mm	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm	200mm
长度A (mm) length A (mm)	79	79	79	79	79	79	79	79	79	79	79
长度B (mm) length B (mm)	51	80	80	100	100	100	100	193	193	338	491
长度C (mm) length C (mm)	3	7	12	17	22	27	32	41	51	105	202
前后死区 (mm) front and rear dead zones	0.5	1	1	1	1	1	1	0.5	0.5	2.5	1

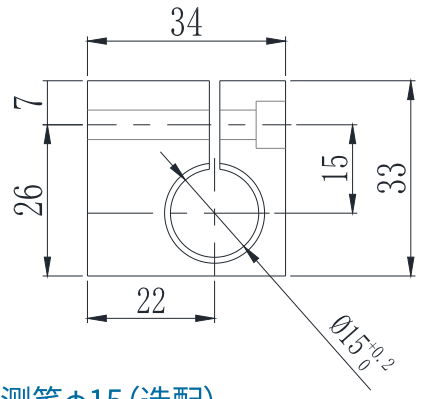
LVDTC20/LVDTC20-P拉杆一体式-数字信号输出
LVDTC20/LVDTC20-P tie rod integral - digital signal output

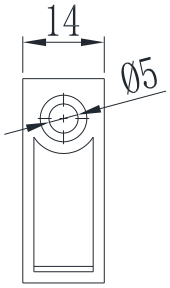
A型侧出线 A type lateral outlet



参数 parameters / 量程 range	2mm	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm	200mm
长度A (mm) length A (mm)	77	77	77	77	77	77	77	77	77	77	77
长度B (mm) length B (mm)	51	80	80	100	100	100	100	193	193	338	491
长度C (mm) length C (mm)	3	7	12	17	22	27	32	41	51	105	202
前后死区 (mm) front and rear dead zones	0.5	1	1	1	1	1	1	0.5	0.5	2.5	1

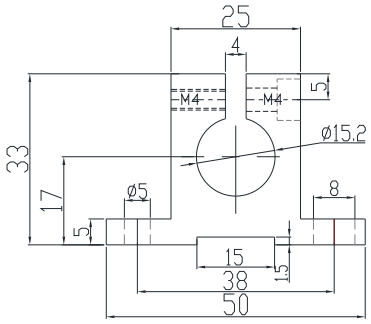
塑料安装支架-测笔φ15（默认）
plastic mounting bracket - stylus ϕ15 (default)

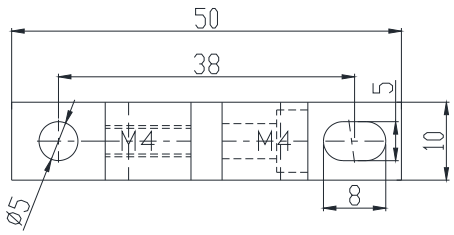






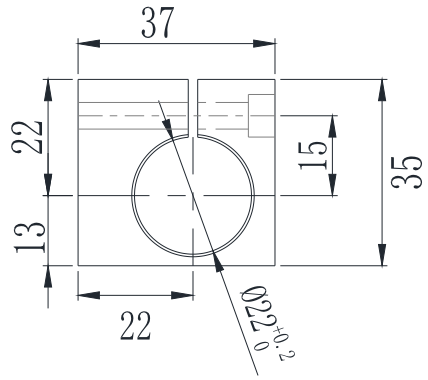
铝制安装支架-测笔φ15（选配）
aluminum mounting support - stylus ϕ15 (optional)

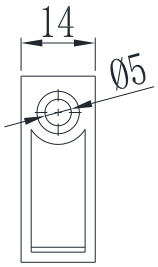






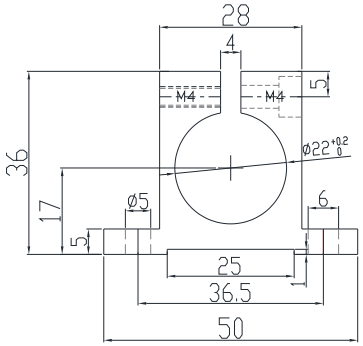
塑料安装支架-电子仓φ22（默认）
plastic mounting support - electronic silo ϕ22 (default)

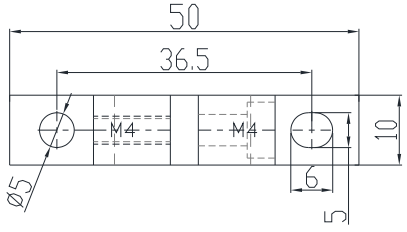






铝制安装支架-电子仓φ22（选配）
aluminum mounting support - electronic silo ϕ22 (optional)



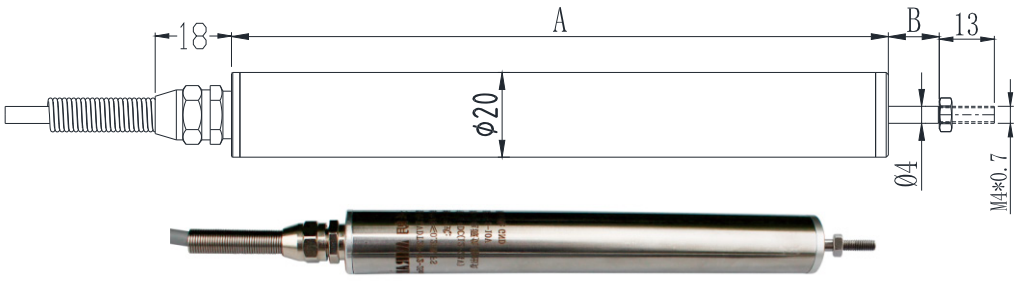




产品尺寸图Product Dimension Drawing

LVDTC20/LVDTC20-P拉杆一体式-模拟信号输出
LVDTC20/LVDTC20-P tie rod integral - analog signal outputs

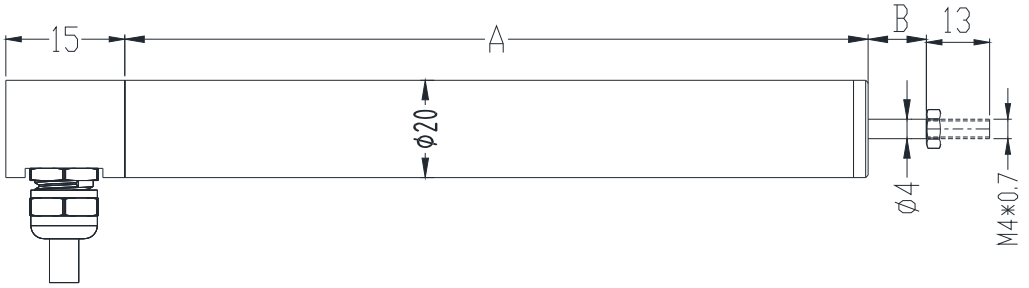
B型直出线 B type straight out line



参数 parameters / 量程 range	2mm	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm	200mm
长度A (mm) length A (mm)	113	140	140	155	155	155	155	260	260	395	558
长度B (mm) length B (mm)	3	7	12	17	22	27	32	41	51	105	202
前后死区 (mm) front and rear dead zones	0.5	1	1	1	1	1	1	0.5	0.5	2.5	1

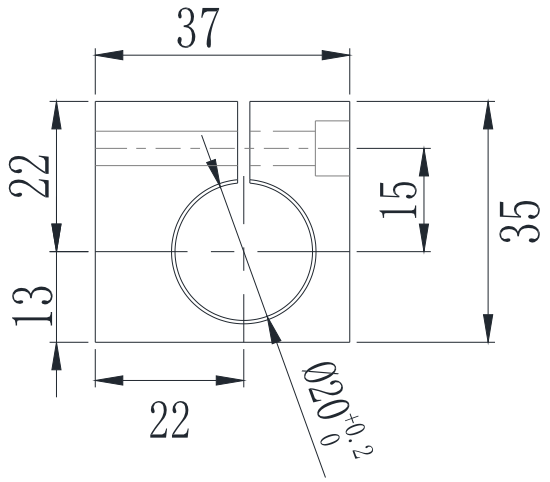
LVDTC20/LVDTC20-P拉杆一体式-模拟信号输出
LVDTC20/LVDTC20-P tie rod integral - analog signal outputs

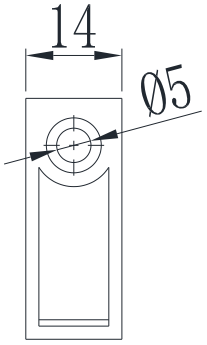
B型侧出线 B type lateral outlet



参数 parameters / 量程 range	2mm	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm	200mm
长度A (mm) length A (mm)	111	138	138	153	153	153	153	258	258	393	556
长度B (mm) length B (mm)	3	7	12	17	22	27	32	41	51	105	202
前后死区 (mm) front and rear dead zones	0.5	1	1	1	1	1	1	0.5	0.5	2.5	1

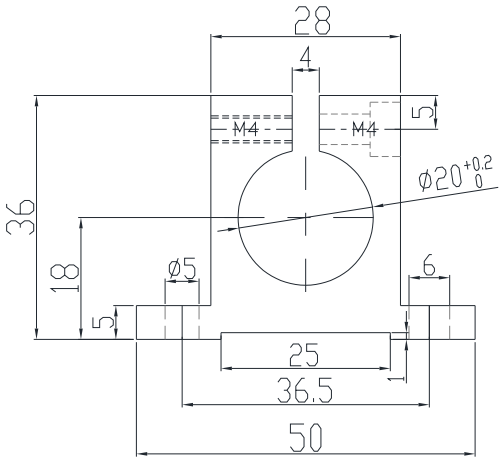
塑料安装支架-电子仓φ20（默认）
plastic mounting support - electronic silo φ20 (default)



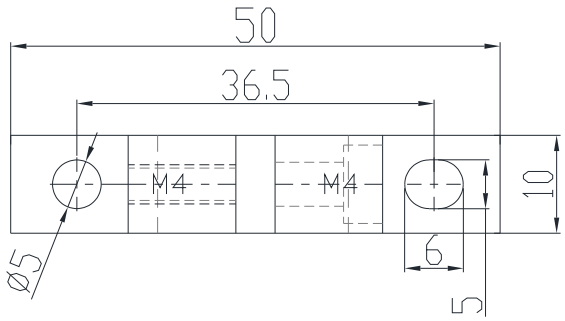




铝制安装支架-电子仓φ20（选配）
aluminum mounting support - electronic silo φ20 (optional)



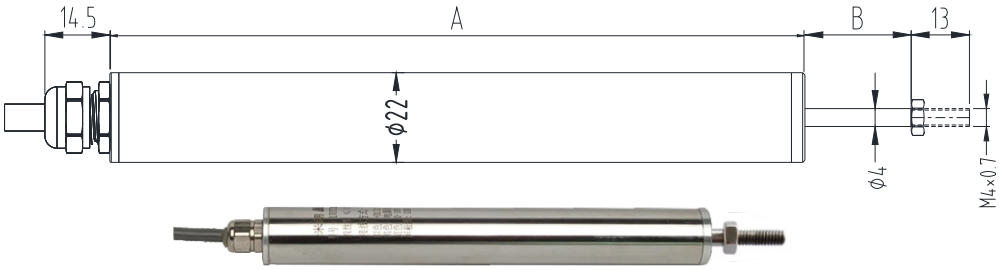




产品尺寸图Product Dimension Drawing

LVDTC20/LVDTC20-P拉杆一体式-数字信号输出
LVDTC20/LVDTC20-P tie rod integral - digital signal output

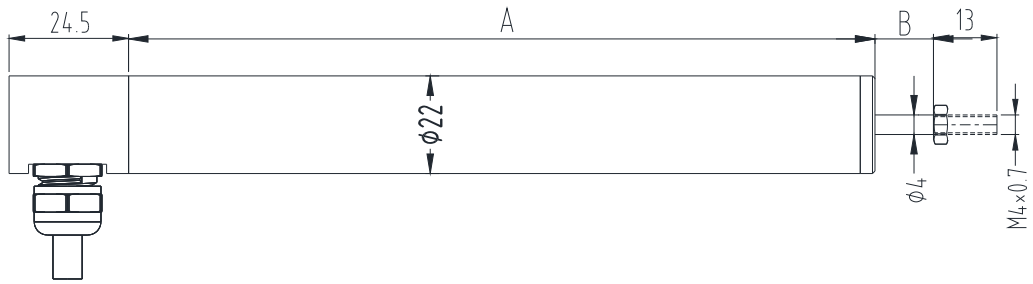
B型直出线 B type straight out line



参数 parameters / 量程 range	2mm	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm	200mm
长度A (mm) length A (mm)	123	150	150	170	170	170	170	270	270	405	568
长度B (mm) length B (mm)	3	7	12	17	22	27	32	41	51	105	202
前后死区 (mm) front and rear dead zones	0.5	1	1	1	1	1	1	0.5	0.5	2.5	1

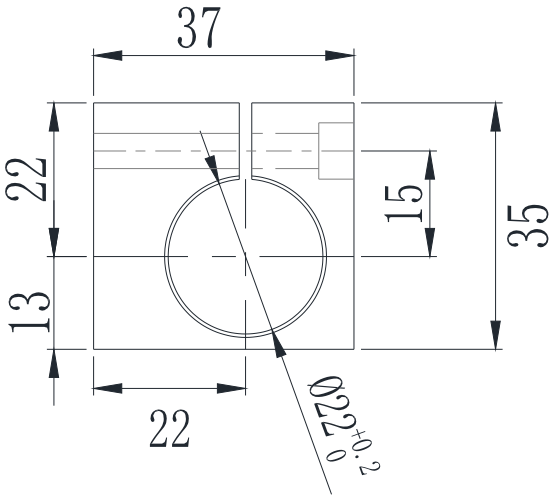
LVDTC20/LVDTC20-P拉杆一体式-数字信号输出
LVDTC20/LVDTC20-P tie rod integral - digital signal output

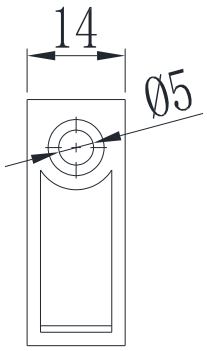
B型侧出线 B type lateral outlet



参数 parameters / 量程 range	2mm	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm	200mm
长度A (mm) length A (mm)	121	148	148	168	168	168	168	268	268	403	566
长度B (mm) length B (mm)	3	7	12	17	22	27	32	41	51	105	202
前后死区 (mm) front and rear dead zones	0.5	1	1	1	1	1	1	0.5	0.5	2.5	1

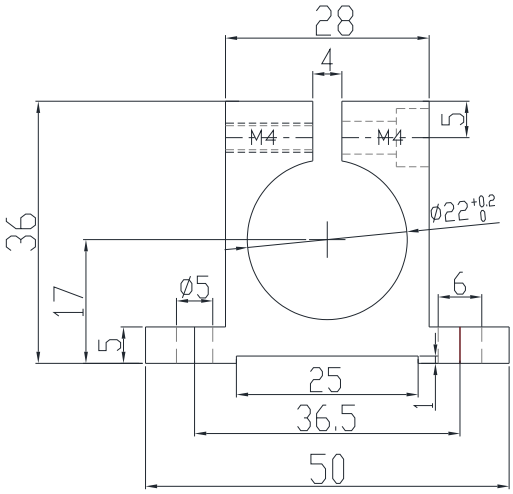
塑料安装支架-电子仓φ22（默认）
plastic mounting support - electronic silo φ22 (default)



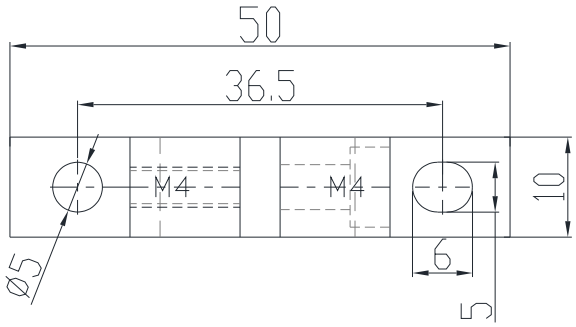




铝制安装支架-电子仓φ22（选配）
aluminum mounting support - electronic silo φ22 (optional)



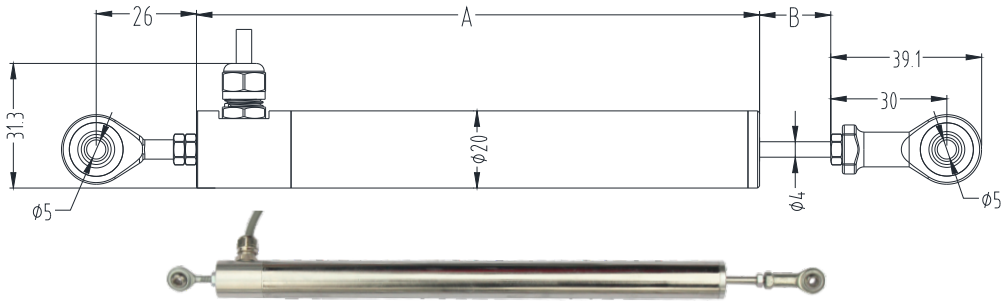




产品尺寸图Product Dimension Drawing

LVDTC20/LVDTC20-P拉杆一体式-模拟信号输出
LVDTC20/LVDTC20-P tie rod integral - analog signal outputs

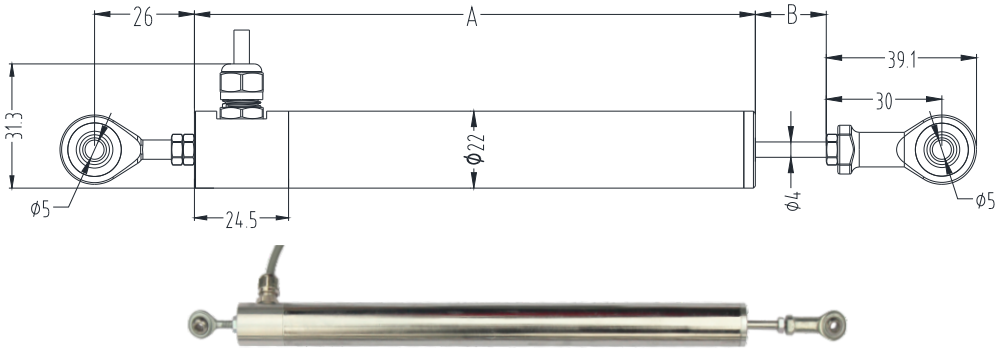
B型两端鱼眼侧出线 B type fisheye at both ends lateral outlet



参数 parameters / 量程 range	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm	200mm
长度A (mm) length A (mm)	162.5	162.5	177.5	177.5	177.5	177.5	282.5	282.5	417.5	580.5
长度B (mm) length B (mm)	7	12	17	22	27	32	41	51	105	202
前后死区 (mm) front and rear dead zones	1	1	1	1	1	1	0.5	0.5	2.5	1

LVDTC20/LVDTC20-P拉杆一体式-数字信号输出
LVDTC20/LVDTC20-P tie rod integral - digital signal output

B型两端鱼眼侧出线 B type fisheye at both ends lateral outlet



参数 parameters / 量程 range	5mm	10mm	15mm	20mm	25mm	30mm	40mm	50mm	100mm	200mm
长度A (mm) length A (mm)	172.5	172.5	192.5	192.5	192.5	192.5	292.5	292.5	427.5	590.5
长度B (mm) length B (mm)	7	12	17	22	27	32	41	51	105	202
前后死区 (mm) front and rear dead zones	1	1	1	1	1	1	0.5	0.5	2.5	1

LVDTC36阀芯位移传感器
LVDTC36 Spool Displacement Sensor

产品实物图Product Picture

LVDTC36阀芯位移传感器
LVDTC36 spool displacement sensor





产品概述Product Overview

LVDTC36阀芯位移传感器采用差动变压器原理进行测量，直流LVDT具有优良的性能，采用方便的单电源+12～+28V DC供电，电子电路密封在304不锈钢金属管内，可以在潮湿和灰尘等恶劣环境中工作,输出信号为标准的可被计算机或PLC使用的电压0-5V、0-10V，电流4-20mA以及RS485数字信号，可以承受35Mpa高压。广泛应用于液压控制领域，比例阀，伺服阀，换向阀，微距伺服油缸等。

LVDTC36阀芯位移传感器的特点耐高压，可承受35MPa；非接触测量原理，防油、防水；测量范围宽2-40mm）；采用机械调零，调零范围2mm，摒弃传统的电位调零方式；高度集成，体积小，使用更方便。

LVDTC36 spool displacement sensor using differential transformer principle for measurement, DC LVDT has excellent performance, using a convenient single power supply +12 ~ +28V DC power supply, electronic circuitry is sealed in 304 stainless steel metal tube, can be in the humidity and dust and other harsh environments, the output signal for the standard can be used by the computer or PLC voltage 0-5V, 0-10V, current 4-20mA and RS485 digital signals, can withstand 35Mpa high pressure. The output signal is standardized voltage 0-5V, 0-10V, current 4-20mA and RS485 digital signal, which can withstand 35Mpa high pressure. Widely used in the field of hydraulic control, proportional valves, servo valves, directional valves, macro servo cylinders and so on.

LVDTC36 spool displacement sensor features high pressure resistance, can withstand 35MPa; non-contact measuring principle, oil-proof, waterproof; wide measuring range (2-40mm); using mechanical zeroing, zero range of 2mm, abandoning the traditional potentiometric zeroing method; highly integrated, small size, more convenient to use.

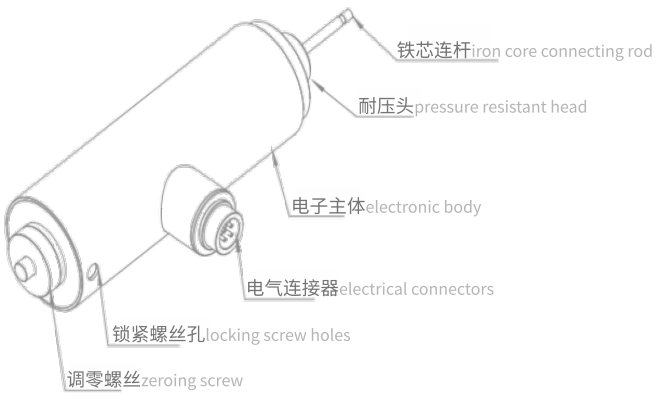
性能参数Performance Parameters

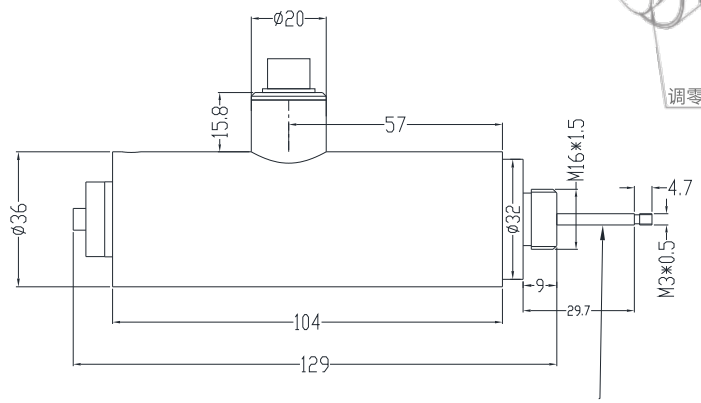
电气指标Electrical indicators

型号 Model number	LVDTC36阀芯位移传感器 LVDTC36 Spool Displacement Sensor		
位移量程 Displacement range	0-40mm	线性误差 Linearity error	≤1%FS
工作电流 Operating current	3.9~22mA	供电电源 Power supply	+12~+28V DC
动态特性 Dynamic property	80Hz	耐压 Pressure resistance	35Mpa
激励电压 Excitation voltage	3Vrms	激励频率 Excitation frequency	5KHz
工作温度 Operating temperature	-25°C~+85°C	温度系数 Temperature coefficient	零点≤0.01%/°C zero ≤ 0.01%/°C
重复误差 Repeatability	最高可达1um up to 1um	零点校准 Zero calibration	机械式调零范围2mm mechanical zeroing range 2mm
输出信号 Output signal	0~5V, 0~10V, 4~20mA, RS485		
分辨率 Resolution	0～10V, 4～20mA 为1um ; 0～5V 为2um; RS485为16bit 0~10V, 4~20mA is 1um; 0~5V is 2um; RS485 is 16bit		

产品尺寸图Product Dimension Drawing

LVDTC36阀芯位移传感器
LVDTC36 spool displacement sensor







铁芯拉杆此时的位置处于量程中点，此点可设为测量起点，(即±20mm的测量起点)。
The position of the iron core tie rod at this point is at the midpoint of the range, this point can be set as the starting point of the measurement,(i.e. ±20mm measurement starting point).

产品型号选型Product Model Selection

LVDT □ - □ - □□ - □ - □

- □：C36：阀芯式系列 C36: spool type series
- □：A：4-20mA输出 A: 4-20mA output；V1：0-5V输出 V1: 0-5V output；V2：0-10V输出 V2: 0-10V output；R：RS485输出 R: RS485 output
- □□：X：可选量程（mm）：20、40 X: selectable ranges (mm): 20、40
- □：A：圆柱形外壳 A: cylindrical housing
- □：4：表示精度≤1%FS 4: indication accuracy≤1%FS

例如Example：

LVDTC36-A-40mm-A-4 表示：米朗科技差动变压LVDTC36阀芯位移传感器4-20mA信号输出，量程为40mm，圆柱形外壳，精度≤1%FS。

LVDTC36-A-40mm-A-4 denotes: miran technology differential variable voltage LVDTC36 spool displacement sensor 4-20mA signal output, range 40mm, cylindrical housing, accuracy ≤1%FS.

使用说明Instructions for use

1、把铁芯连杆上入阀芯并锁紧螺丝。

1. Put the iron core linkage up into the spool and lock the screws.

2、将耐压管套住铁芯连杆并上入阀块锁紧螺丝。

2. Put the pressure-resistant tube over the iron core connecting rod and up into the valve block locking screw.

3、将传感器主体部分套在耐压管上，安装上调零螺丝。

3. Put the main part of the sensor on the pressure-resistant tube and install the zeroing screw.

4、插上连接线并给传感器供电24V，使传感器正常工作，可以接入电压表或者电流表对输出信号进行监测，旋动调零螺丝，移动传感器内部线圈在耐压管上的位置，一般以量程的一半做为安装的测试起点，即此时电压表，电流表读数如果是0-5V输出则为2.5V，如果是0-10V则为5V，如果是4-20mA则为12mA。

4. Plug in the connection line and give the sensor power supply 24V, so that the sensor works properly, you can access the voltmeter or ammeter output signal monitoring, rotating the zero screw, move the sensor internal coil in the pressure-resistant tube position, generally half of the range to do for the installation of the test starting point, that is, at this time, the voltmeter, ammeter readings if the output is 0-5V for 2.5V, if 0-10V is 5V, if 4-20mA is 12mA.

5、此时拧紧锁紧螺丝，锁紧耐压管，固定传感器位置，安装完成。

5. At this time, tighten the locking screws, lock the pressure-resistant tube, fixed sensor position, the installation is complete.

注：传感器默认测杆往里压进去的时候数据变大，如果需要反方向变大需要提前通知！

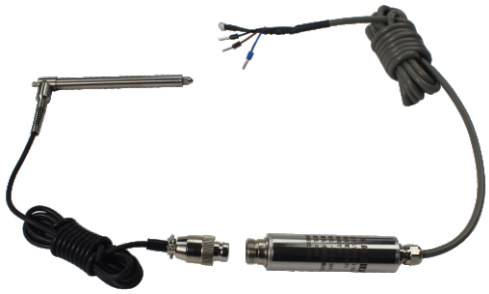
Note: The sensor default data becomes larger when the measuring rod is pressed inward, if it needs to be larger in the opposite direction, you need to notify in advance!

LVDT8Q气动式位移传感器
LVDT8Q Pneumatic Displacement Sensor

产品实物图Product Picture

LVDT8Q气动式位移传感器
LVDT8Q pneumatic displacement transducer





产品概述Product Overview

LVDT8Q气动式差动变压器式位移传感器可广泛应用于航天航空，机械，建筑，纺织，铁路，煤炭，冶金，塑料，化工以及科研院校等国民经济各行各业，用来测量伸长，振动，物体厚度，膨胀等的高技术产品。

LVDT8Q气动式位移传感器具有优良的性能，适用于质量控制和计量应用中的高精度、高重复性的测量。测头采用高硬度的耐磨材料氮化硅陶瓷球，测轴移动部分采用精密导轨。气动式位移传感器外配变送器可输出标准的直流信号，采用方便的单电源+12～+30V DC供电，电子电路密封在304不锈钢金属管内，可以在潮湿和灰尘等恶劣环境中工作。输出信号为标准的可被计算机或PLC使用的0-5V，0-10V，4-20mA或RS485输出。

LVDT8Q pneumatic differential transformer type displacement sensor can be widely used in aerospace, machinery, construction, textile, railroad, coal, metallurgy, plastics, chemical industry, as well as scientific research colleges and universities and other industries of the national economy, used to measure the elongation, vibration, the thickness of the object, the expansion of high-tech products.

The LVDT8Q pneumatic displacement transducer offers excellent performance for highly accurate and repeatable measurements in quality control and metrology applications. The probe head is made from a high hardness, wear resistant silicon nitride ceramic ball and the moving part of the measuring axis uses a precision guide rail. Pneumatic displacement sensors with external transmitters can output standard DC signals, using a convenient single power supply +12 ~ +30V DC power supply, electronic circuitry is sealed in 304 stainless steel metal tube, can be in the humidity and dust and other harsh environments. The output signal is standard 0-5V, 0-10V, 4-20mA or RS485 output which can be used by computer or PLC.or RS485 output.

产品型号选型Product Model Selection

LVDT □ - □ - □□ - □ - □ - □

8Q:气动式系列
8Q: pneumatic series

A:4-20mA输出
A: 4-20mA output

V1:0-5V输出
V1: 0-5V output

V2:0-10V输出
V2: 0-10V output

V3:±5V输出(四线制)
V3: ±5V output (4-wire)

V4:±10V输出(四线制)
V4: ±10V output (4-wire)

R:RS485输出
R: RS485 output

X:可选量程(mm):
X: selectable ranges (mm):
2.5、5、10

1:表示精度≤0.1%FS(适用于量程2.5、5mm)
1: indication accuracy ≤0.1%FS(for range 2.5, 5mm)

2:表示精度≤0.15%FS(适用于量程10mm)
2: indication accuracy ≤0.15%FS(for range 10mm)

3:表示精度≤0.25%FS
3: indication accuracy ≤0.25%FS

4:表示精度≤1%FS
4: indication accuracy≤1%FS

P:加强屏蔽系列(可选)
P: reinforced shielding series (optional)

A:电子仓是直径20mm(模拟量)/22mm(数字量)的圆管
A: the electronic silo is a cylindrical tube with a diameter of 20mm (analog) / 22mm (digital)

B:电子仓是长方块(默认新款,旧款可选)
B: the electronics bin is a rectangle (default new model,old model optional)

C:电子仓是卧式长方形L80*W62*H32mm(四线制专用电子仓)
C: electronic compartment is horizontal rectangle L80*W62*H32mm (4-wire special electronic compartment)

D:电子仓是卧式长方形L80*W48*H46mm(四线制专用电子仓)
D: electronic compartment is horizontal rectangle L80*W48*H46mm (4-wire special electronic compartment)

E:电子仓是长方形L73*W27*H24mm
E: electronic compartment is rectangular L73*W27*H24mm

K:电子仓是导轨卡扣式L73*W19*H28mm
K: electronic compartment is rail snap type L73*W19*H28mm



A型分体式电子仓
Type A split electronic silo



B型分体式电子仓
Type B split electronic silo



C型分体式电子仓
Type C split electronic silo



D型分体式电子仓
Type D split electronic silo



E型分体式电子仓
Type E split electronic silo



K型分体式电子仓
Type K split electronic silo

例如:LVDT8Q-A-2.5mm-DL-A-1 表示LVDT8Q气动式系列,4-20mA信号输出,量程2.5mm,A型分体式电子仓,精度≤0.1%FS。
For example: LVDT8Q-A-2.5mm-DL-A-1 indicates LVDT8Q pneumatic series, 4-20mA signal output, range 2.5mm, A-type split electronic compartment, accuracy ≤ 0.1%FS.

注意事项Caveat

1、LVDT8Q气动式系列、LVDT8Q-P气动式加强屏蔽系列不带防尘套。

1、LVDT8Q Pneumatic Series, LVDT8Q-P Pneumatic Enhanced Shielded Series without Dust Jacket.

2、LVDT8Q气动式系列如需要矩阵安装，每只测笔之间的安装最小间距不小于40mm。

2、LVDT8Q pneumatic series, such as the need for matrix installation, the minimum distance between the installation of each stylus is not less than 40mm.

3、若需要更小安装间距，请选LVDT8Q-P气动式加强屏蔽系列，LVDT8Q-P气动式加强屏蔽系列矩阵安装时，每只测笔之间的安装最小间距为5-10mm。LVDT8Q-P气动式加强屏蔽系列外形尺寸与LVDT8Q气动式外形尺寸相同，但工艺和材料略有不同。

3、If you need a smaller installation distance, please select the LVDT8Q-P pneumatic enhanced shielding series, LVDT8Q-P pneumatic enhanced shielding series matrix installation, each stylus between the installation of the minimum spacing of 5-10mm. LVDT8Q-P pneumatic enhanced shielding series external dimensions and LVDT8Q pneumatic external dimensions are the same, but the process and materials are slightly different.

4、测量前请务必先排除死区（可定制无死区）。

4、Be sure to eliminate dead zones before measuring (customizable without dead zones)

5、A型分体式电子仓模拟量输出直径20mm，数字量输出直径22mm；旧款B型分体式电子仓，E型分体式电子尺和K型分体式电子仓仅可做模拟量信号输出；新款B型分体式电子仓，C型分体式电子仓和D型分体式电子仓可做模拟量信号输出或数字量信号输出。

5、Model A split terminal analog output diameter 20mm, digital output diameter 22mm; old model B split terminal, model E split terminal and model K split terminal can be used for analog signal output only; new model B split terminal, model C split terminal and model D split terminal can be used for analog signal output or digital signal output.

6、4-20mA电流输出默认为二线制，可选四线制；0-5V和0-10V电压输出默认为三线制，可选4线制；±5V和±10V电压信号输出只能做四线制（以上信号输出选择四线制时下单需备注且只能选择C型分体式电子仓或者D型分体式电子仓）。

6、4-20mA current output is 2-wire by default, 4-wire optional; 0-5V and 0-10V voltage output is 3-wire by default, 4-wire optional; ±5V and ±10V voltage signal output can only be done in 4-wire system (When choosing 4-wire system for the above signal output, you need to make a note when placing an order and you can only choose the C-type split sub-electronic sub-store or the D-type split sub-electronic sub-store).

7、传感器测笔和变送器必须配套（测笔编号与变送器编号一致）使用，禁止随意调换，否则传感器线性精度将严重失真。

7、The sensor stylus and transmitter must be used as a matched set (stylus number and transmitter number are the same) and must not be switched, or the sensor linearity accuracy will be severely distorted.

8、气动式的LVDT传感器默认没拉出数值最大，完全拉出数值最小。如需改变输出大小方向，请提前告知！

8、Pneumatic LVDT sensors default to a maximum value without pulling out and a minimum value with pulling out completely. If you need to change the output size, please inform us in advance!

性能参数Performance Parameters

电气指标Electrical indicators

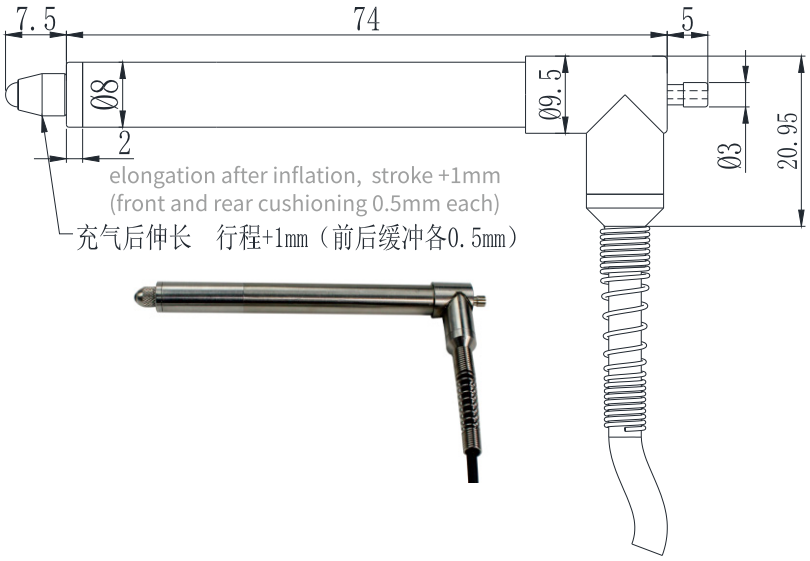
型号 Model number	LVDT8Q
输出信号 Output signal	0~5V，0~10V，4~20mA，RS485
工作电流 Operating current	电压输出型 电流＜10mA voltage output type current <10mA
	二线制4-20mA电流输出型 电流3. 8~24mA 2-wire 4-20mA current output type current 3.8~24mA
	RS485输出型 电流15~40MA RS485 output type current 15~40mA
驱动方式 Driving method	气动式 pneumatic
位移量程 Displacement range	2.5mm，5mm，10mm
线性误差 Linearity error	≤0.1%FS：量程2.5、5mm；≤0.15%FS：量程10mm ≤0.1%FS: range 2.5, 5mm; ≤0.15%FS: range 10mm
分辨率 Resolution	≤0.1um（最高）数字式输出是16bit ≤0.1um (max.) digital output is 16bit
重复误差 Repeatability	0.1um

性能指标Performance indicators

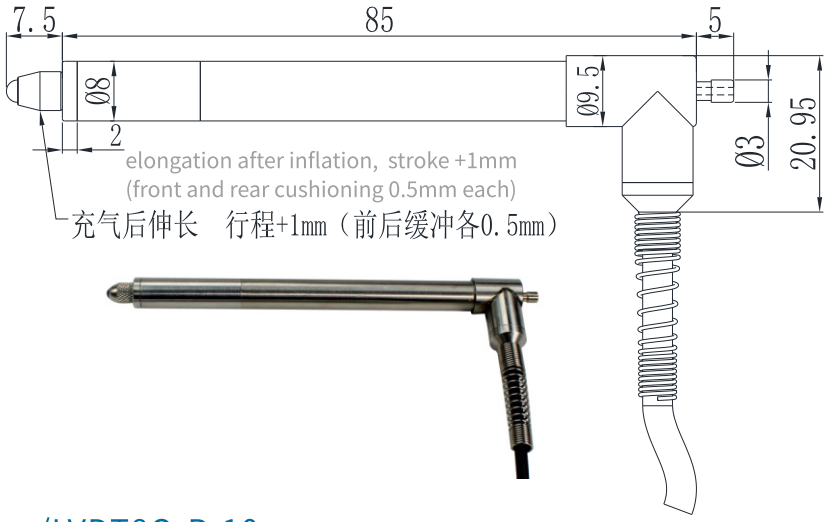
供电电源 Power supply	+12~+30V DC
推力 Thrust	0.25N(±0.05)@0.03MPa
振动允限 Vibration tolerance	10g/2KHz
激励频率 Excitation frequency	5KHz
灵敏度 Sensitivity	≤0.025%/℃
耐受冲击 Impact resistance	250g/11毫秒 250g/11 ms
工作气压 Working air pressure	0.03MPa~0.06MPa
激励电压 Excitation voltage	3Vrms
温度系数 Temperature coefficient	零点≤0.01%/℃ zero ≤ 0.01%/℃
工作温度 Operating temperature	25℃~+85℃

产品尺寸图Product Dimension Drawing

LVDT8Q-2.5mm/LVDT8Q-P-2.5mm



LVDT8Q-5mm/LVDT8Q-P-5mm



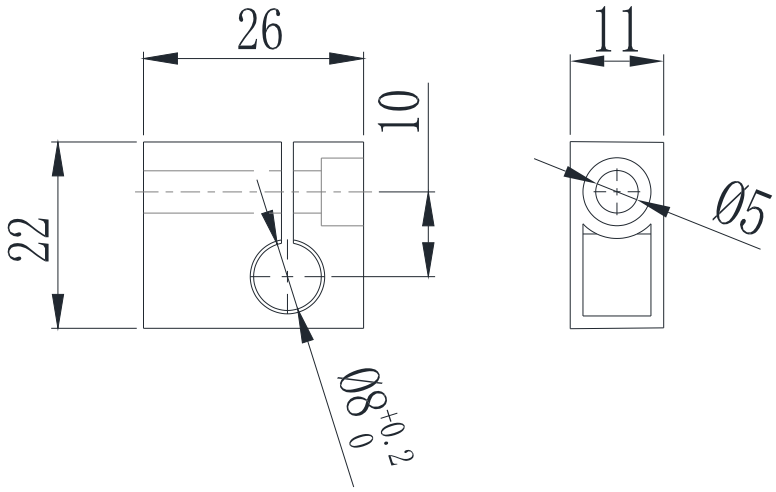
LVDT8Q-10mm/LVDT8Q-P-10mm



注:LVDT8Q气动式位移传感器需要选型量程和电子仓。

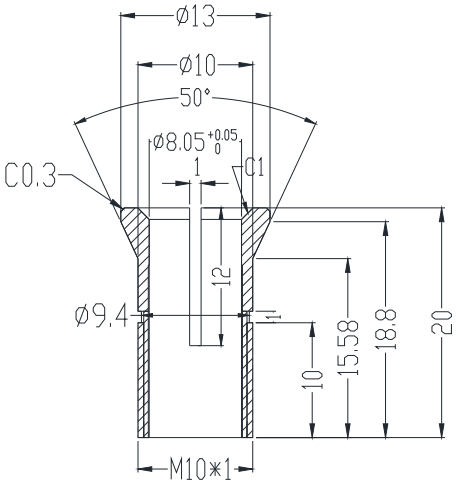
Note: The LVDT8Q pneumatic displacement transducer requires an optional range and electronic bin.

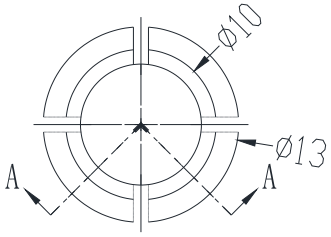
塑料安装支架-测笔ϕ8（默认）
plastic mounting support - stylus ϕ8 (default)





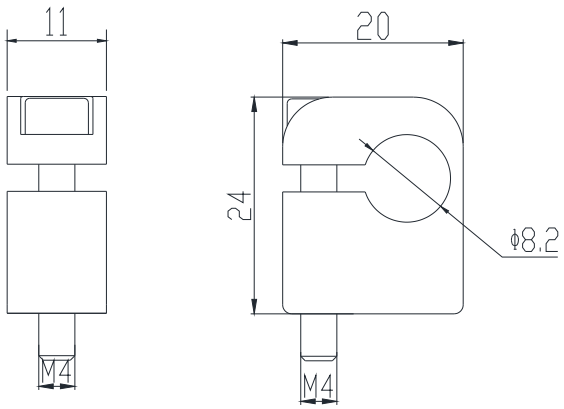
圆形金属安装支架-测笔ϕ8(选配)
round metal mounting bracket - stylus ϕ8 (optional)

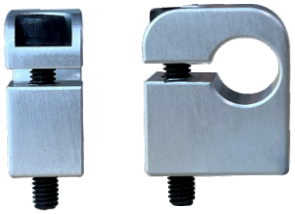




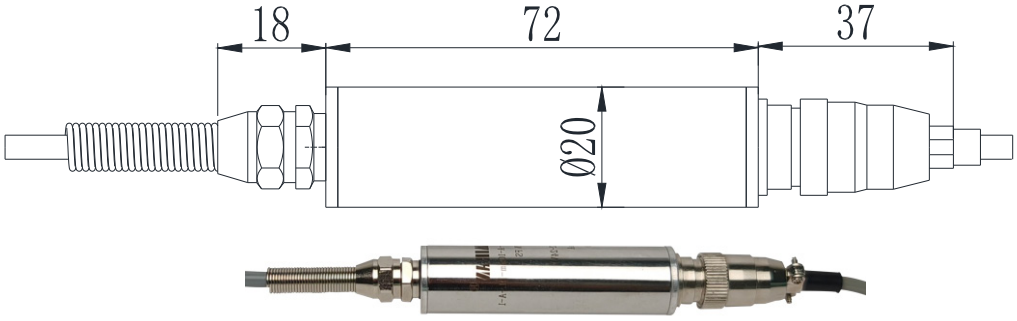


方形金属安装支架-测笔ϕ8(选配)
square metal mounting bracket - stylus ϕ8 (optional)

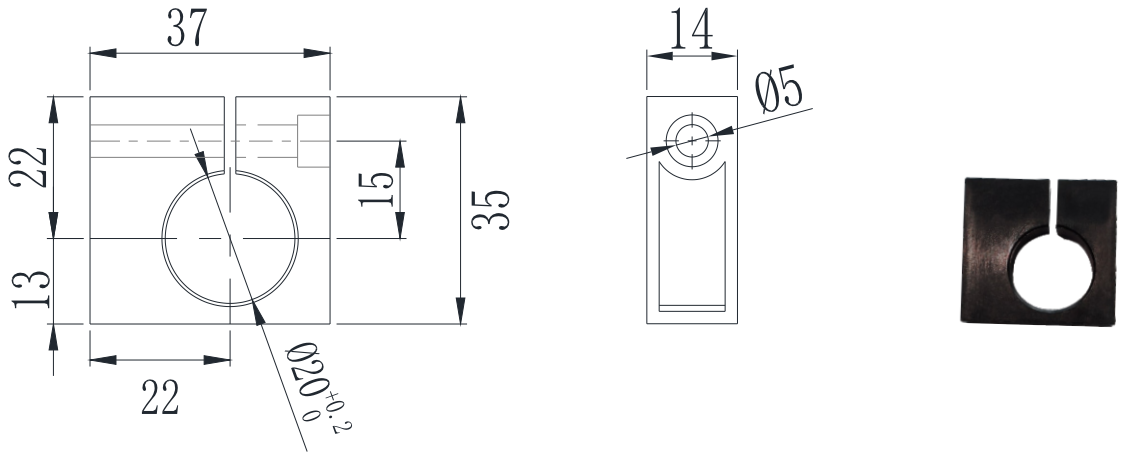




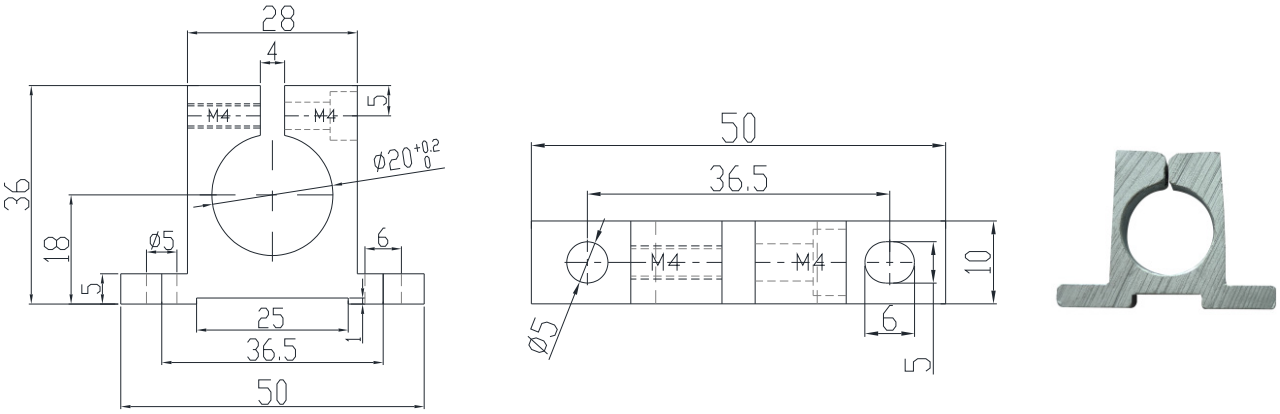
A型电子仓(模拟量)
Type A electronic silo (analog)



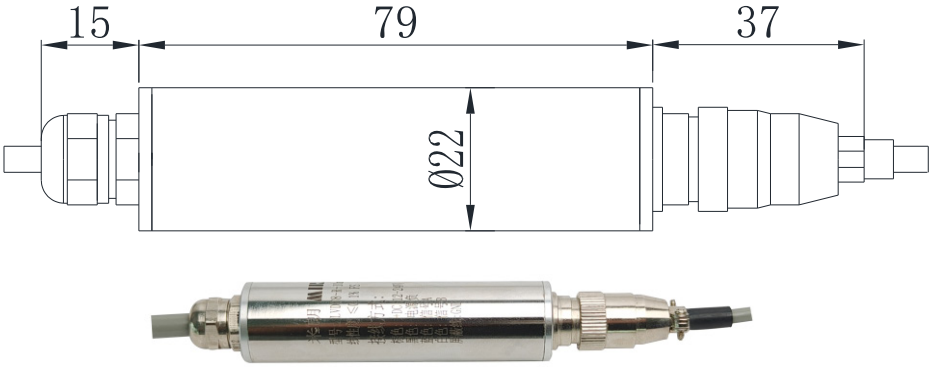
塑料安装支架-电子仓φ20(默认)
plastic mounting support - electronic silo ϕ20 (default)



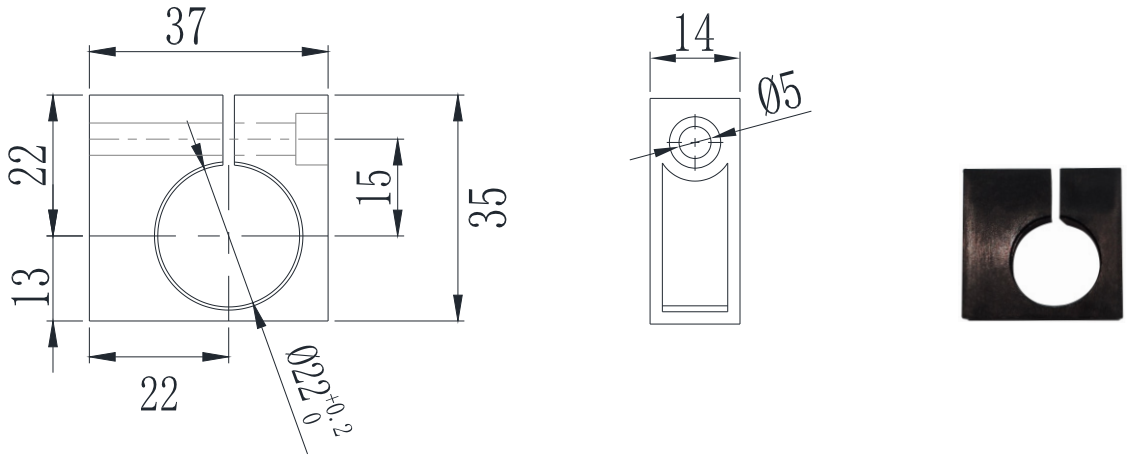
铝制安装支架-电子仓φ20(选配)
aluminum mounting support - electronic silo ϕ20 (optional)



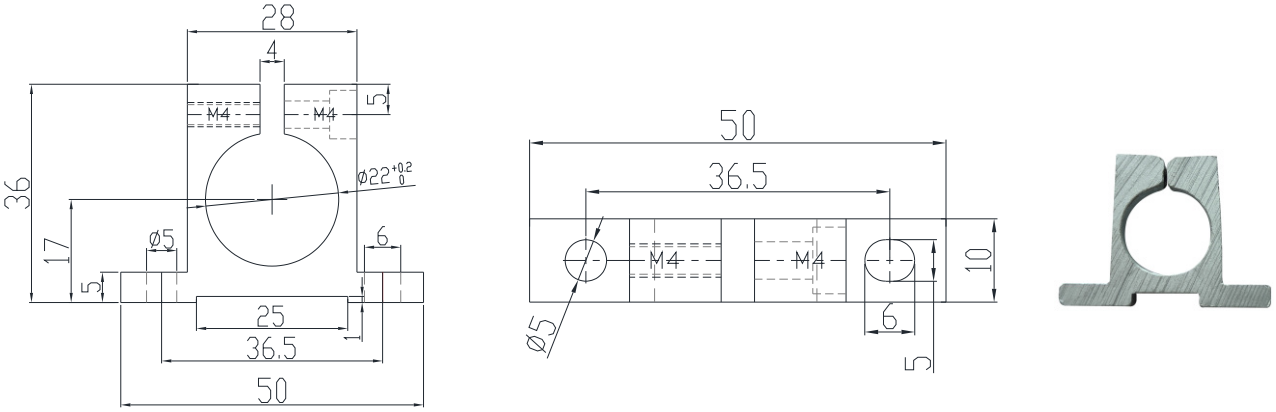
A型电子仓（数字量）
Type A electronic silo (digital)



塑料安装支架-电子仓ϕ22（默认）
plastic mounting support - electronic silo ϕ22 (default)



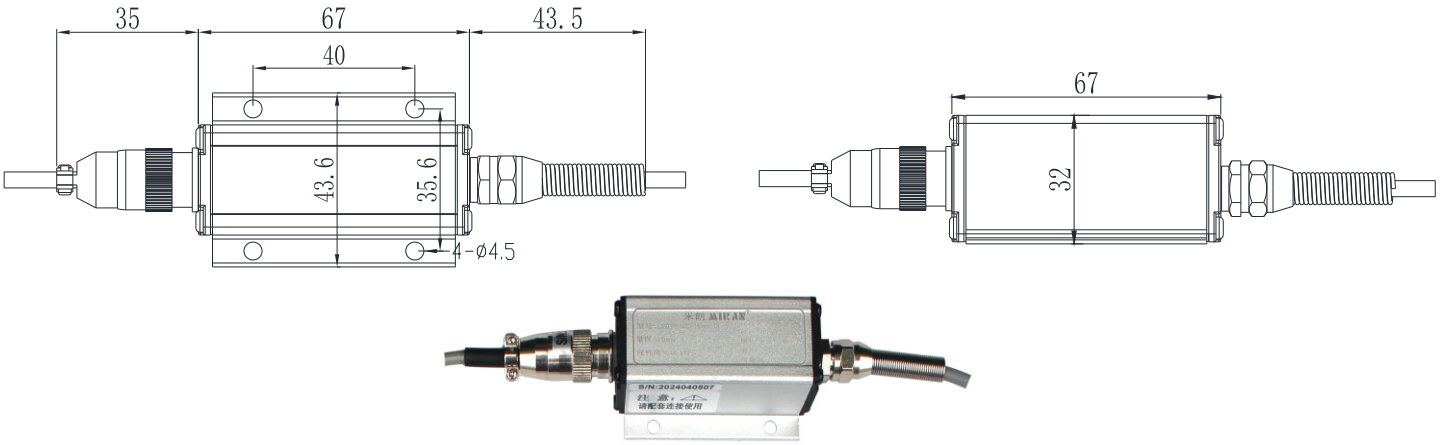
铝制安装支架-电子仓ϕ22（选配）
aluminum mounting support - electronic silo ϕ22 (optional)



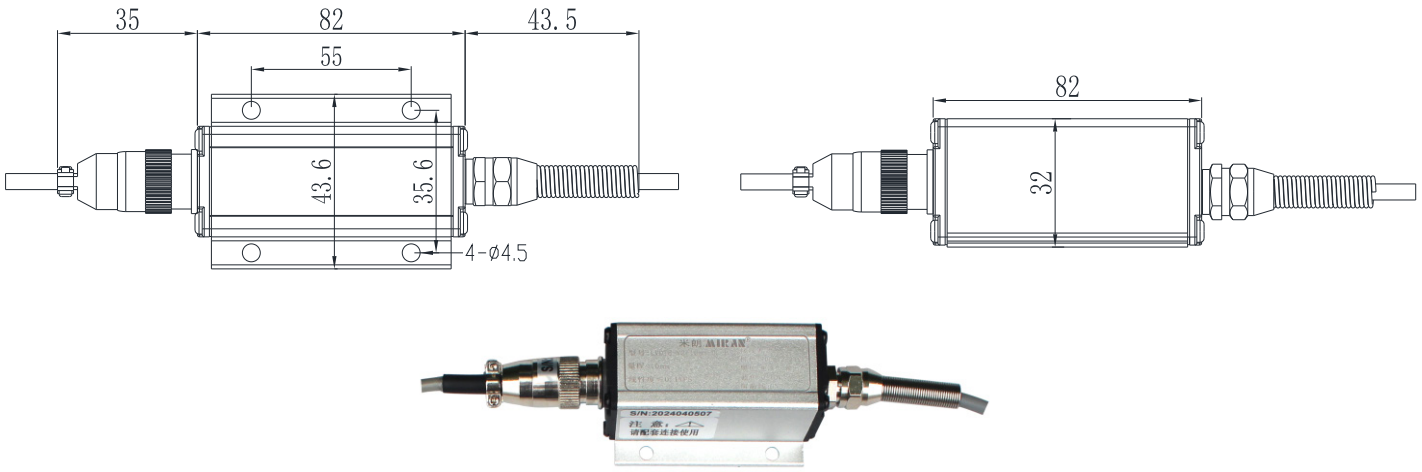
B型电子仓
Type B electronic warehouse

新款B型电子仓(默认)
New type B electronic silo (default)

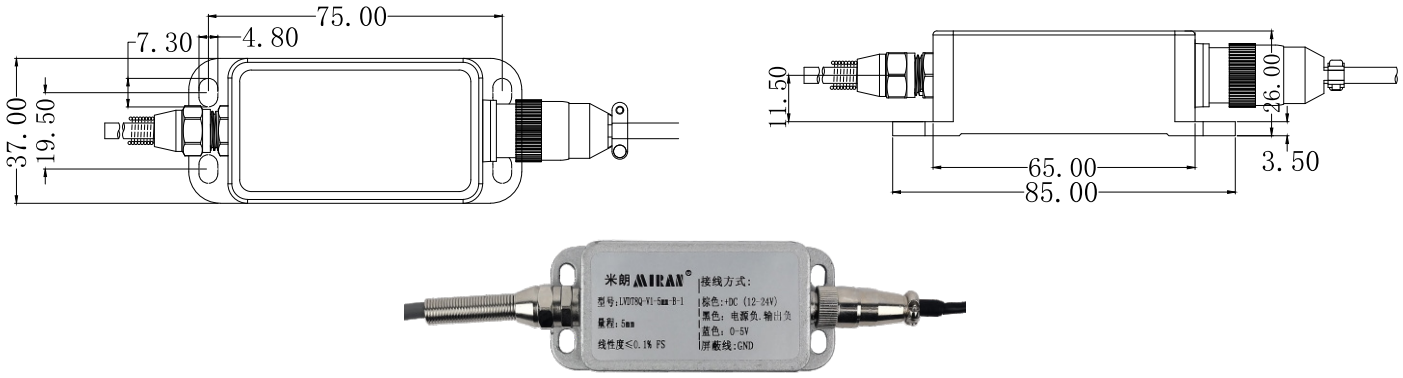
模拟量信号
Analog signal



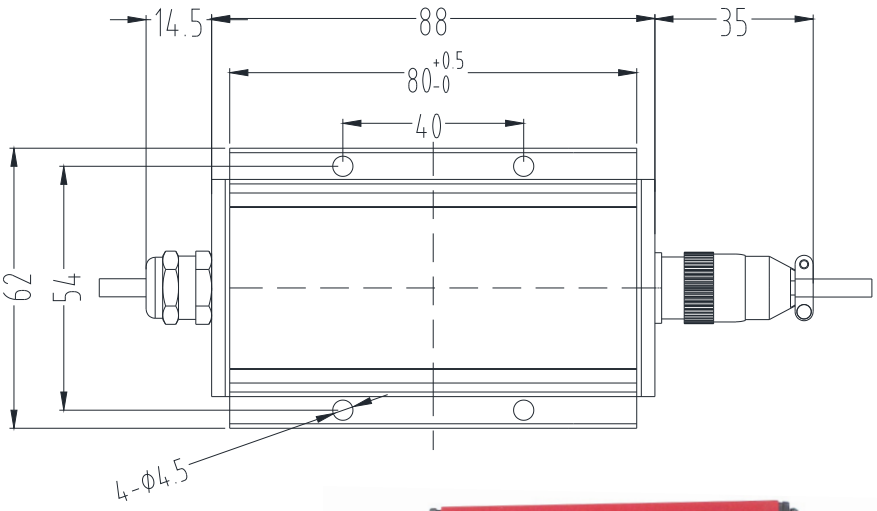
数字量信号
Digital signal

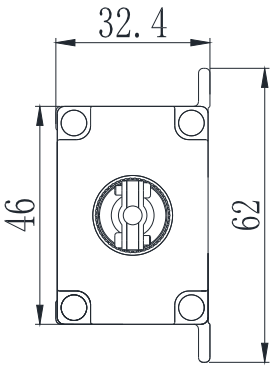


旧款B型电子仓(可选)
old type B electronic silo (optional)



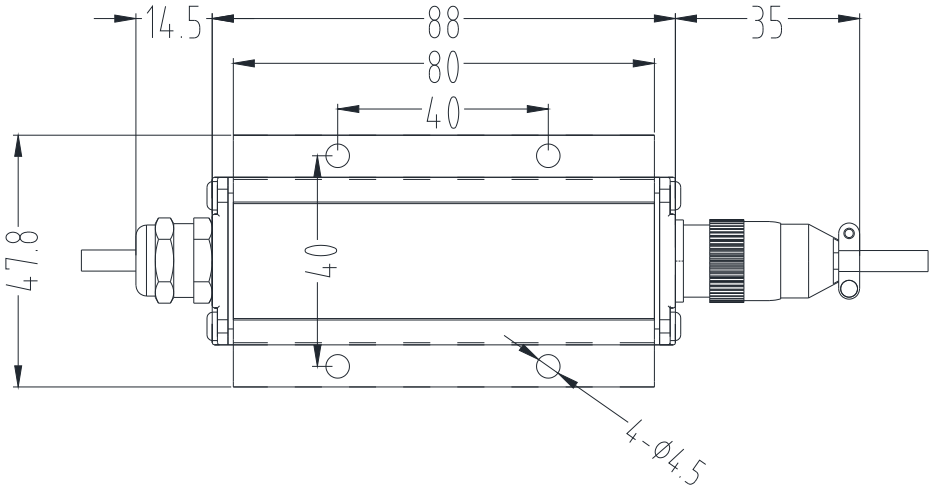
四线制C型电子仓Four-wire C-type electronic warehouse

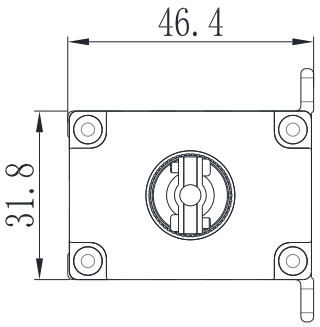






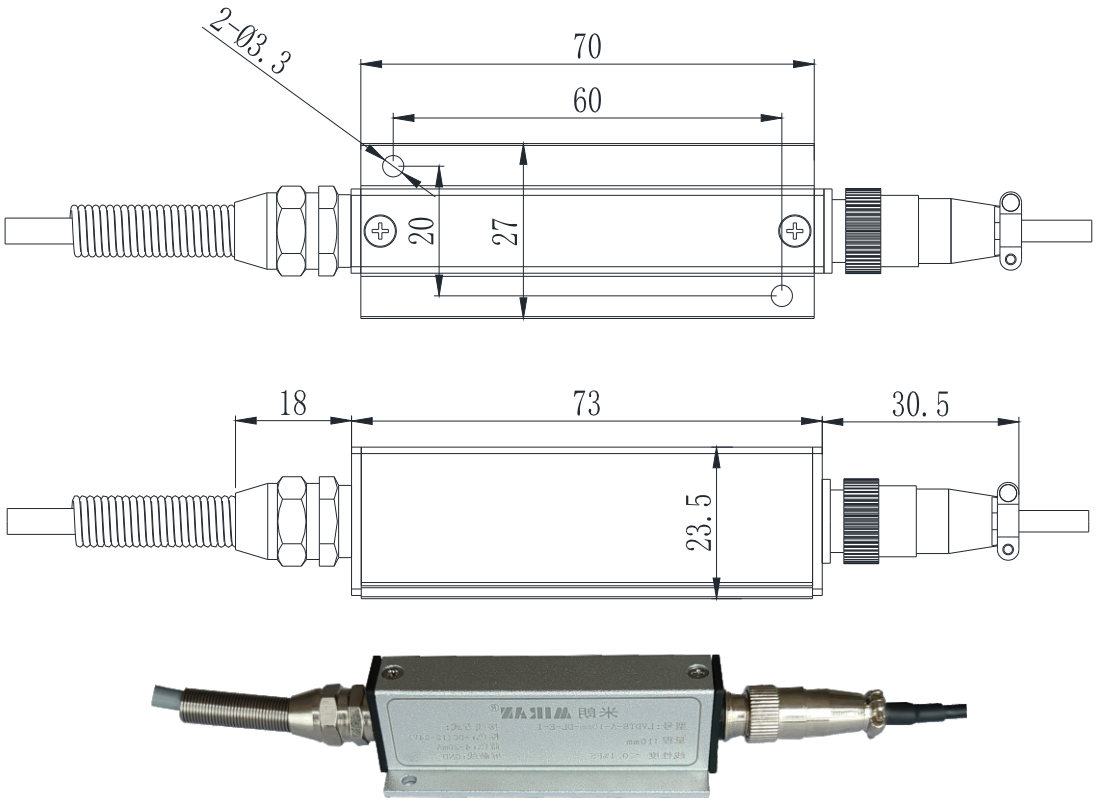
四线制D型电子仓Four-wire D-type electronic warehouse



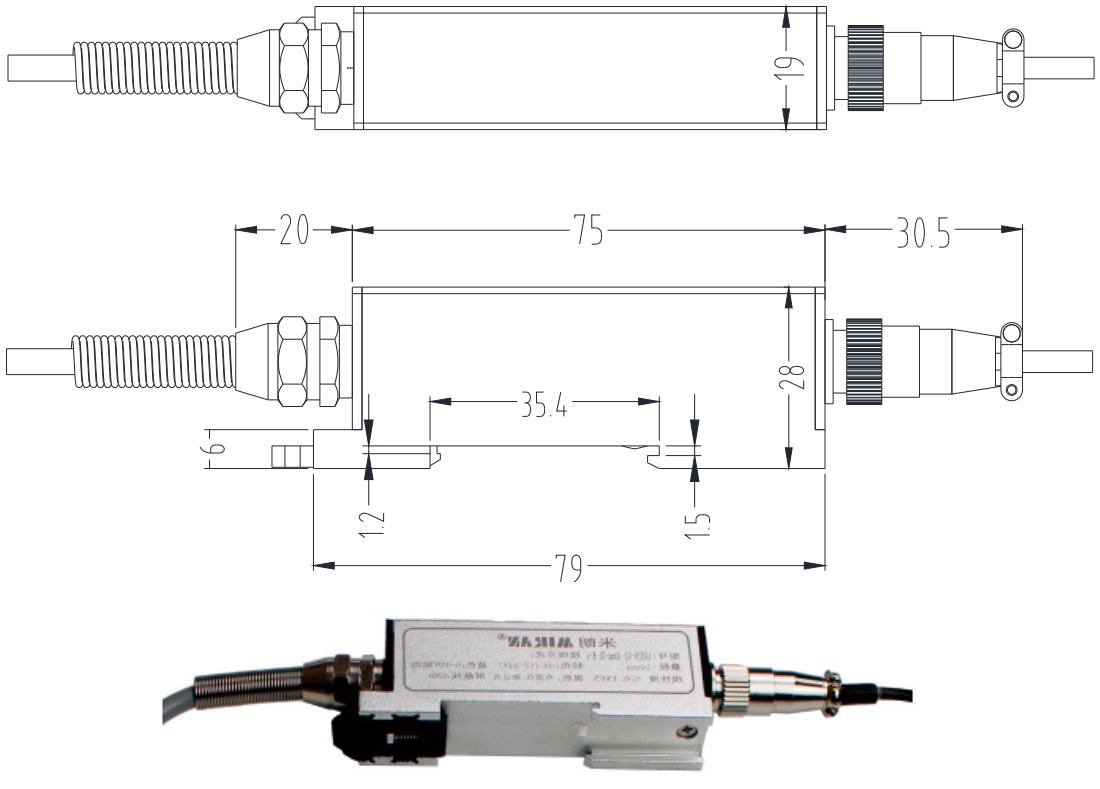




E型带耳安装式电子仓
E-type with ear-mounted electronic compartment



K型导轨卡扣式电子仓
K-rail snap-on electronic bin

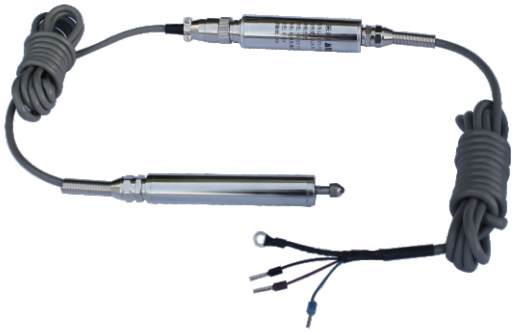


LVDTFS/LVDTCFS防水型位移传感器
LVDTFS/LVDTCFS Waterproof Displacement Sensor

产品实物图Product Picture

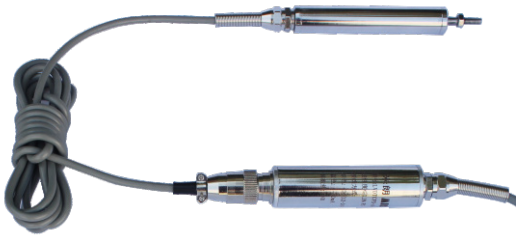
LVDTFS防水回弹式
LVDTFS waterproof rebound





LVDTCFS防水拉杆式
LVDTCFS waterproof trolley type





产品概述Product Overview

LVDTFS/LVDTCFS防水型差动变压器式位移传感器可广泛应用于航天航空，机械，建筑，纺织，铁路，煤炭，冶金，塑料，化工以及科研院校等国民经济各行各业，用来测量伸长，振动，物体厚度，膨胀等的高技术产品。

LVDTFS/LVDTCFS防水型位移传感器具有优良的性能，采用方便的单电源+12～24V DC供电，电子电路密封在304不锈钢金属管内，可以在潮湿和灰尘等恶劣环境中工作，输出信号为标准的可被计算机或PLC使用的0-5V、0-10V或4-20mA输出。该产品的特点是内置精密直线轴承，重复性好；探头为氮化硅陶瓷球，耐磨性好；无滑动触点，使用寿命长；直流单电源供电，内置高性能信号解调器；二线制4-20mA电流输出，三线制0-5V或0-10V电压输出，四线制RS485数字信号。

LVDTFS/LVDTCFS waterproof differential transformer type displacement sensor can be widely used in aerospace, machinery, construction, textile, railroad, coal, metallurgy, plastics, chemical industry, as well as scientific research colleges and universities and other industries of the national economy, used to measure the elongation, vibration, the thickness of the object, the expansion of high-tech products.

LVDTFS/LVDTCFS waterproof displacement sensor has excellent performance, using a convenient single power supply +12 ~ 24V DC power supply, electronic circuitry is sealed in 304 stainless steel metal tube, can be in the humidity and dust and other harsh environments, the output signal is a standard can be used by the computer or PLC 0-5V or 0-10V or 4-20mA output. The output signal is a standard 0-5V, 0-10V or 4-20mA output which can be used by computer or PLC. The product is characterized by built-in precision linear bearings, good repeatability; probe for the silicon nitride ceramic ball, good wear resistance; no sliding contacts, long service life; DC single power supply, built-in high-performance signal demodulator; two-wire 4-20mA current output, three-wire 0-5V or 0-10V voltage output, four-wire RS485 digital signal.

性能参数Performance Parameters

电气指标Electrical indicators

LVDTFS/LVDTCFS防水型位移传感器 LVDTFS/LVDTCFS Waterproof Displacement Sensor			
供电电源 Power supply	+12~30V DC	工作电流 Operating current	4~50mA
温度系数 Temperature coefficient	零点≤0.01%/°C zero ≤ 0.01%/°C	振动允限 Vibration tolerance	10g/2KHz
激励电压 Excitation voltage	3Vrms	激励频率 Excitation frequency	5KHz
灵敏度 Sensitivity	≤0.025%/°C	工作温度 Operating temperature	-25°C~+85°C
防护等级 Protection class	IP68（测笔） IP68 (stylus)	耐受冲击 Impact resistance	250g/11毫秒 250g/11 ms
	IP65（变送器） IP65 (transmitter)	重复误差 Repeatability	最高可达1um up to 1um
线性误差 Linearity error	≤0.1%FS：量程5mm；≤0.15%FS：量程10，15，20，25，30，40，50mm ≤0.1%FS: range 5mm; ≤0.15%FS: range 10,15,20,25,30,40,50mm		
分辨率 Resolution	≤0.1μm；数字式输出是16bit ≤0.1μm; digital output is 16bit		
位移量程 Displacement range	5mm，10mm，20mm，25mm，40mm，50mm		
输出信号 Output signal	0~5V，0~10V，4~20mA，RS485		
动态特性 Dynamic property	20Hz（拉杆式最高可达50Hz） 20Hz (up to 50Hz for drawbar)		

产品型号选型Product Model Selection

LVDT □ - □ - □□ - □□ - □ - □ - □

FS：防水回弹式
FS: waterproof rebound type
CFS：防水拉杆式
CFS: waterproof trolley type

A：4-20mA输出
A: 4-20mA output
V1：0-5V输出
V1: 0-5V output
V2：0-10V输出
V2: 0-10V output
V3：±5V输出（四线制）
V3: ±5V output (4-wire)
V4：±10V输出（四线制）
V4：±10V output (4-wire)
R：RS485输出
R: RS485 output

X：可选量程(mm)：
X: Optional range (mm):
5、10、15、20、25、30
注：40mm，50mm，100mm等量程，如有需要，请与技术人员沟通。
Note: 40mm,50mm,100mm and other ranges. If you need, please communicate with the technician.

DL：测笔尾部直出线
DL: stylus tail straight out
SL：测笔尾部侧出线
SL: stylus tail side exit line

1：表示精度≤0.1%FS（适用于量程5mm）
1: indication accuracy ≤0.1%FS (for range 5mm)
2：表示精度≤0.15%FS(适用于量程10，15，20，25，30，40，50mm)
2: indication accuracy ≤0.15%FS (for range 10,15,20,25,30,40,50mm)
3：表示精度≤0.25%FS（适用于量程100mm）
3: indication accuracy ≤0.25%FS (for range 100mm)
4：表示精度≤1%FS
4: indication accuracy≤1%FS

P：加强屏蔽系列（可选）
P: reinforced shielding series (optional)


A型分体式电子仓
Type A split electronic silo


B型分体式电子仓
Type B split electronic silo


C型分体式电子仓
Type C split electronic silo


D型分体式电子仓
Type D split electronic silo


E型分体式电子仓
Type E split electronic silo


K型分体式电子仓
Type K split electronic silo

A：电子仓是直径20mm（模拟量）/22mm（数字量）的圆管
A: the electronic silo is a cylindrical tube with a diameter of 20mm (analog) / 22mm (digital)
B：电子仓是长方块（默认新款，旧款可选）
B: the electronics bin is a rectangle (default new model,old model optional)
C：电子仓是卧式长方形L80*W62*H32mm（四线制专用电子仓）
C: electronic compartment is horizontal rectangle L80*W62*H32mm (4-wire special electronic compartment)
D：电子仓是卧式长方形L80*W48*H46mm（四线制专用电子仓）
D: electronic compartment is horizontal rectangle L80*W48*H46mm (4-wire special electronic compartment)
E：电子仓是长方形L73*W27*H24mm
E: electronic compartment is rectangular L73*W27*H24mm
K：电子仓是导轨卡扣式L73*W19*H28mm
K: electronic compartment is rail snap type L73*W19*H28mm

例如：LVDTFS-A-5mm-DL-A-1 表示LVDTFS防水回弹式系列，4-20mA信号输出，量程5mm，测笔尾部直出线，A型分体式电子仓，精度≤0.1%FS。
For example: LVDTFS-A-5mm-DL-A-1 indicates the LVDTFS waterproof rebound series, 4-20mA signal output, 5mm range, straight out wire at the end of the stylus, A-type split electronic compartment, accuracy ≤0.1%FS.

注意事项Caveat

1、LVDTFS防水回弹式系列下单默认不带防尘套，如需带防尘套，下单时需备注。
1、LVDTFS waterproof rebound series order default does not come with a dust cover, such as the need to bring a dust cover, the need to note when ordering.

2、LVDTFS-P防水回弹式加强屏蔽系列下单默认不带防尘套，如需带防尘套，下单时需备注。
2、LVDTFS-P waterproof rebound reinforced shielding series order default does not come with a dust cover, if you need to bring a dust cover, you need to note when ordering.

3、LVDTCFS防水拉杆式、LVDTCFS-P防水拉杆式加强屏蔽系列均不带防尘套。
3、 LVDTCFS waterproof trolley type, LVDTCFS-P waterproof trolley type reinforced shielding series are without dust jacket.

4、LVDTFS-P/LVDTCFS-P加强屏蔽系列是在LVDTFS/LVDTCFS测笔基础上加强屏蔽功能。LVDTFS-P/LVDTCFS-P加强屏蔽系列外形尺寸与LVDTFS/LVDTCFS外形尺寸相同，但工艺和材料略有不同。
4、The LVDTFS-P/LVDTCFS-P Enhanced Shielding Series is an enhanced shielding feature based on the LVDTFS/LVDTCFS stylus. The LVDTFS-P/LVDTCFS-P Enhanced Shielding Series has the same dimensions as the LVDTFS/LVDTCFS, with slight differences in process and materials..

5、LVDTFS/LVDTCFS系列如需要矩阵安装，每只测笔之间的安装最小间距不小于40mm；若需要更小安装间距，请选LVDTFS-P/LVDTCFS-P加强屏蔽系列，LVDTFS-P/LVDTCFS-P加强屏蔽系列矩阵安装时，每只测笔之间的安装最小间距为5-10mm。
5、LVDTFS/LVDTCFS series, if matrix installation is required, the minimum spacing between each stylus is not less than 40mm; if you need a smaller spacing, please select the LVDTFS-P/LVDTCFS-P reinforced shielding series, LVDTFS-P/LVDTCFS-P reinforced shielding series, the minimum spacing between each stylus is 5-10mm for matrix installation. 10mm.

6、测量前请务必先排除死区（可定制无死区）。
6、Please be sure to remove the dead zone before measurement (can be customized without dead zone).

7、A型分体式电子仓模拟量输出直径20mm，数字量输出直径22mm；旧款B型分体式电子仓，E型分体式电子尺和K型分体式电子仓仅可做模拟量信号输出；新款B型分体式电子仓，C型分体式电子仓和D型分体式电子仓可做模拟量信号输出或数字量信号输出。
7、The diameter of analog output of A-type electronic warehouse is 20mm, the diameter of digital output is 22mm. The old type B electronic bin can only do analog signal output; the new type B electronic bin can do analog signal output or digital signal output.

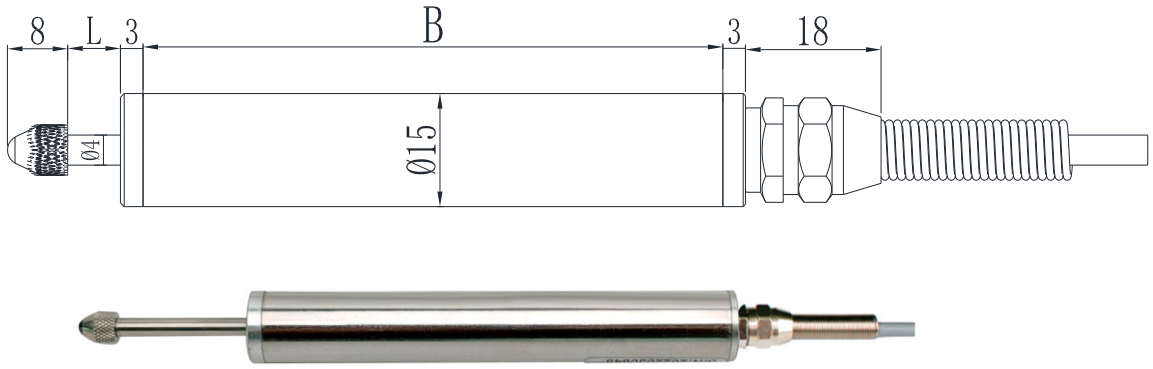
8、4-20mA电流输出默认为二线制，可选四线制；0-5V和0-10V电压输出默认为三线制，可选4线制；±5V和±10V电压信号输出只能做四线制（以上信号输出选择四线制时下单需备注且只能选择C型分体式电子仓或者D型分体式电子仓）。
8、4-20mA current output is 2-wire by default, 4-wire optional; 0-5V and 0-10V voltage output is 3-wire by default, 4-wire optional; ±5V and ±10V voltage signal output can only be done in 4-wire system (When choosing 4-wire system for the above signal output, you need to make a note when placing an order and you can only choose the C-type split sub-electronic sub-store or the D-type split sub-electronic sub-store)

9、传感器测笔和变送器必须配套（测笔编号与变送器编号一致）使用，禁止随意调换，否则传感器线性精度将严重失真。
9、The sensor stylus and transmitter must be used as a matched set (stylus number and transmitter number are the same) and must not be switched, or the sensor linearity accuracy will be severely distorted.

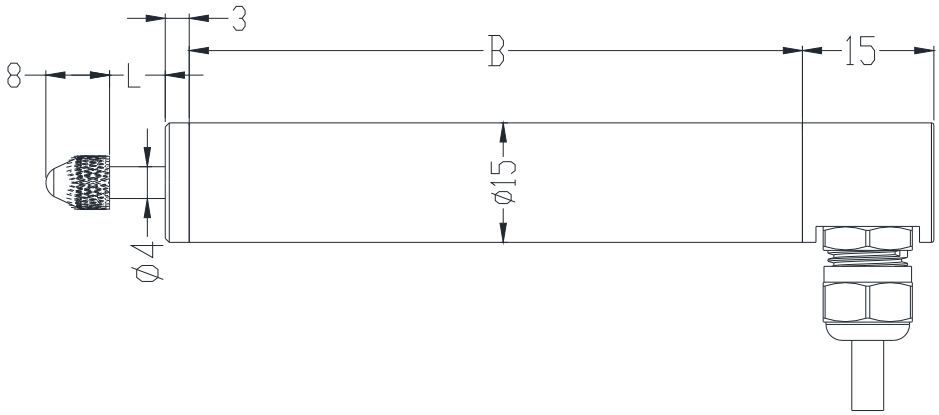
10、回弹式的LVDT传感器默认未压缩数值最小，压缩到底数值最大；拉杆式的LVDT传感器默认没拉出数值最大，完全拉出数值最小。如需改变输出大小方向，请提前告知！
10、The default value of the rebound LVDT sensor is the smallest uncompressed value, and the value of the fully compressed value is the largest; the default value of the lever-type LVDT sensor is the smallest value when it is not pulled out, and the value of the fully pulled out value is the smallest. If you need to change the output size, please inform us in advance!

产品尺寸图Product Dimension Drawing

LVDTFS/LVDTFS-P防水回弹式-测笔-直出线
LVDTFS/LVDTFS-P waterproof rebound - stylus - straight out line



LVDTFS/LVDTFS-P防水回弹式-测笔-侧出线
LVDTFS/LVDTFS-P waterproof rebound - stylus - side exit wire

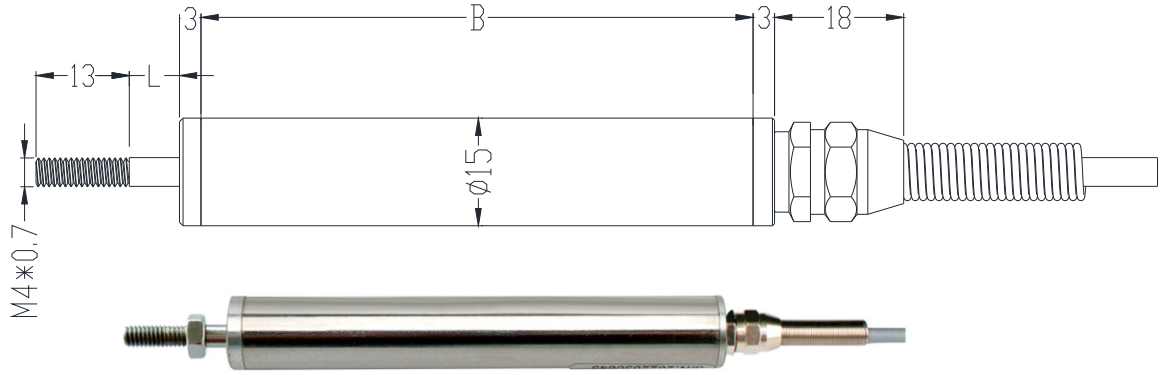


量程 range / 参数 parameters	5mm	10mm	15mm	20mm	25mm	30mm
长度B (mm) length B (mm)	77	77	97	97	97	97
长度L (mm) length L (mm)	7	12	17	22	27	32

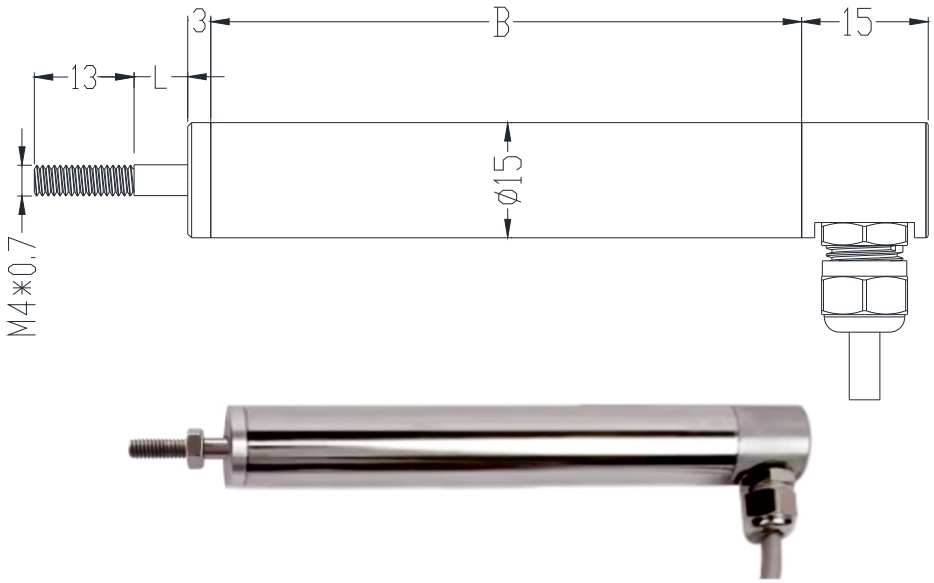
注:LVDTFS/LVDTCFS防水型位移传感器需要选型量程和电子仓。
Note: LVDTFS/LVDTCFS waterproof displacement transducers require optional ranges and electronic bins.

产品尺寸图Product Dimension Drawing

LVDTCFS/LVDTCFS-P防水拉杆式-测笔-直出线
LVDTCFS/LVDTCFS-P waterproof tie rod - stylus - straight outline



LVDTCFS/LVDTCFS-P防水拉杆式-测笔-侧出线
LVDTCFS/LVDTCFS-P waterproof tie rod - stylus - side outlet

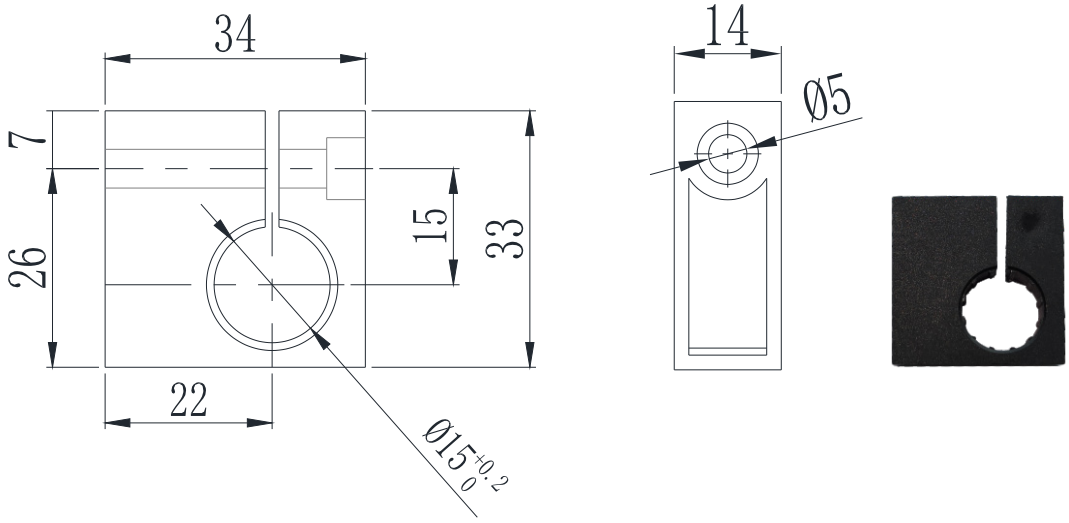


量程 range / 参数 parameters	5mm	10mm	15mm	20mm	25mm	30mm
长度B (mm) length B (mm)	77	77	97	97	97	97
长度L (mm) length L (mm)	7	12	17	22	27	32

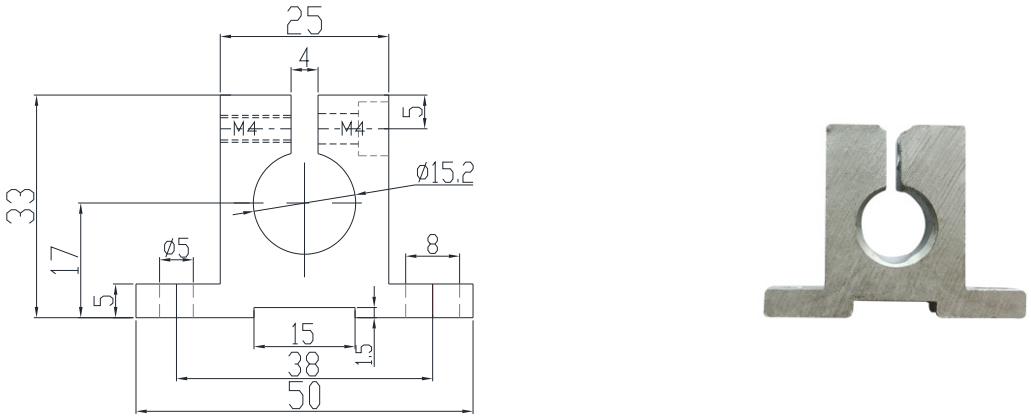
注:LVDTFS/LVDTCFS防水型位移传感器需要选型量程和电子仓。

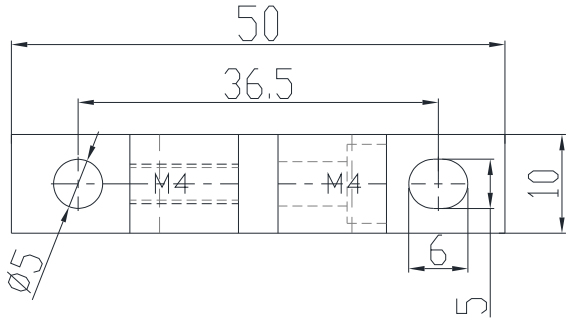
Note: LVDTFS/LVDTCFS waterproof displacement transducers require optional ranges and electronic bins.

塑料安装支架-测笔ϕ15（默认）
plastic mounting support - stylus ϕ15 (default)

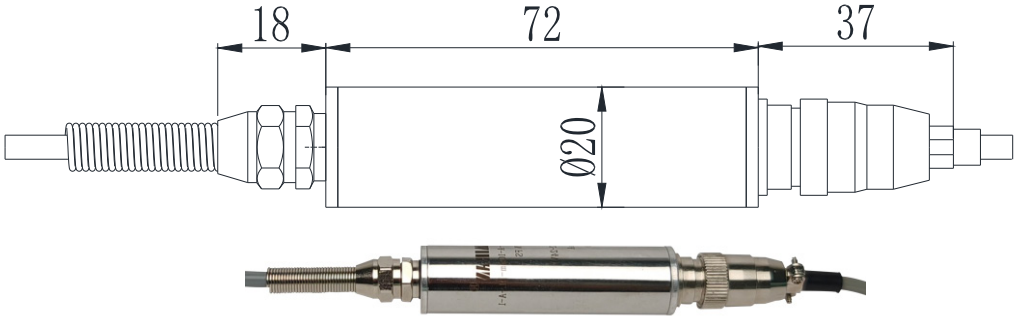


铝制安装支架-测笔ϕ15(选配)
aluminum mounting support - stylus ϕ15 (optional)

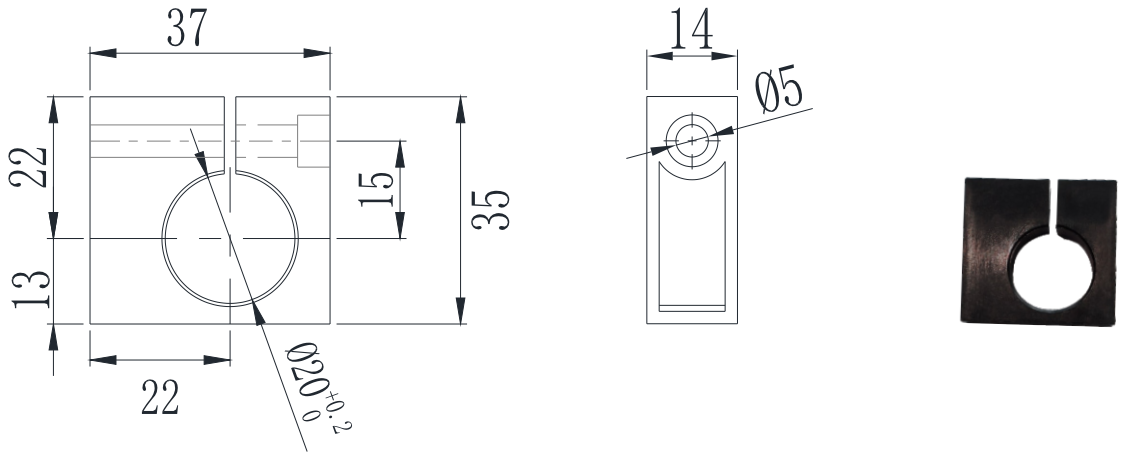




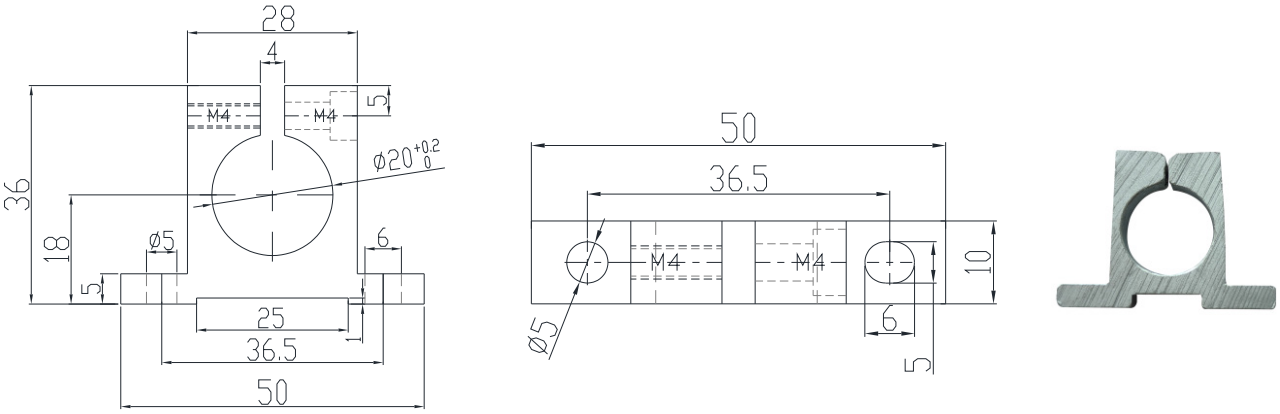
A型电子仓 (模拟量)
Type A electronic silo (analog)



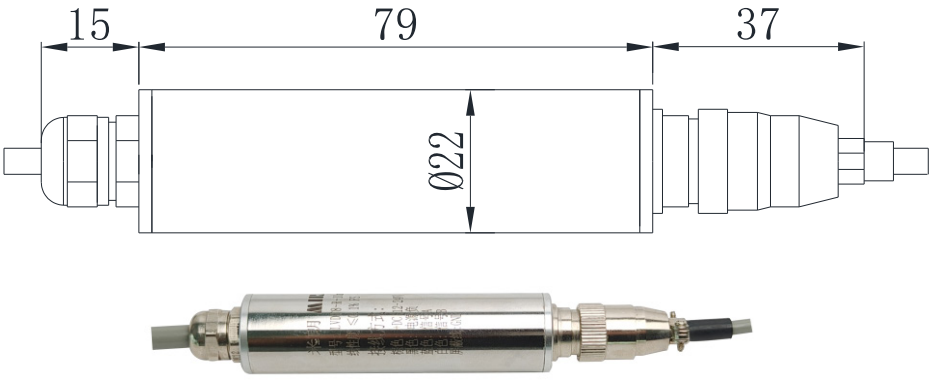
塑料安装支架-电子仓φ20 (默认)
plastic mounting support - electronic silo φ20 (default)



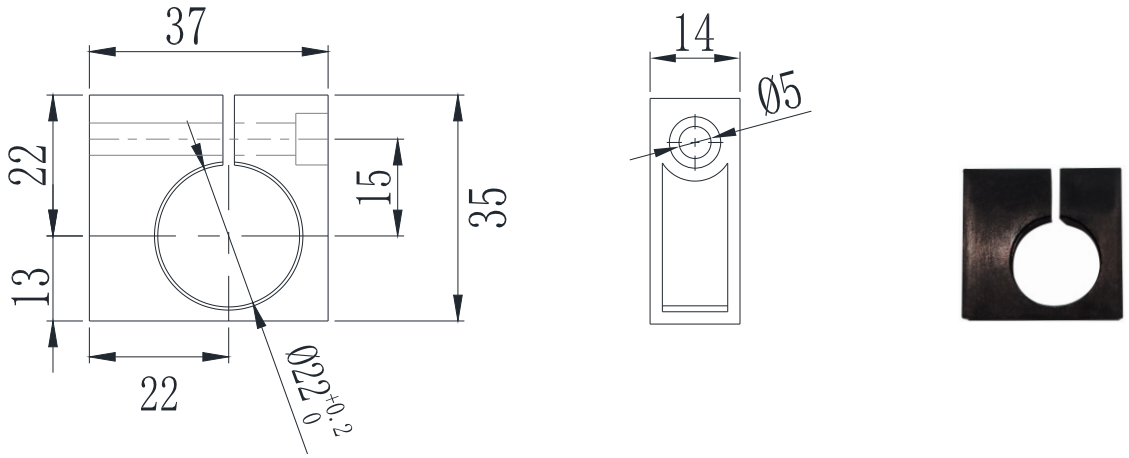
铝制安装支架-电子仓φ20 (选配)
aluminum mounting support - electronic silo φ20 (optional)



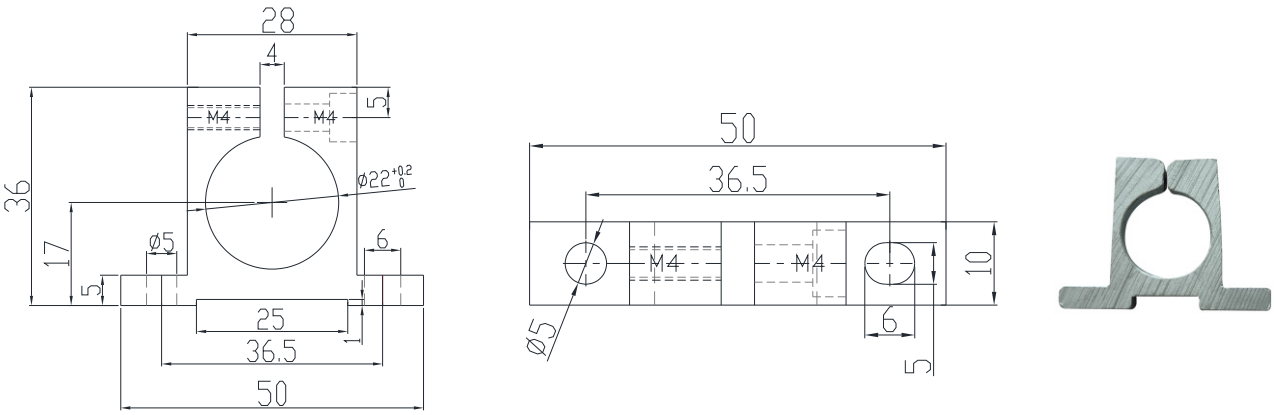
A型电子仓（数字量）
Type A electronic silo (digital)



塑料安装支架-电子仓ϕ22（默认）
plastic mounting support - electronic silo ϕ22 (default)



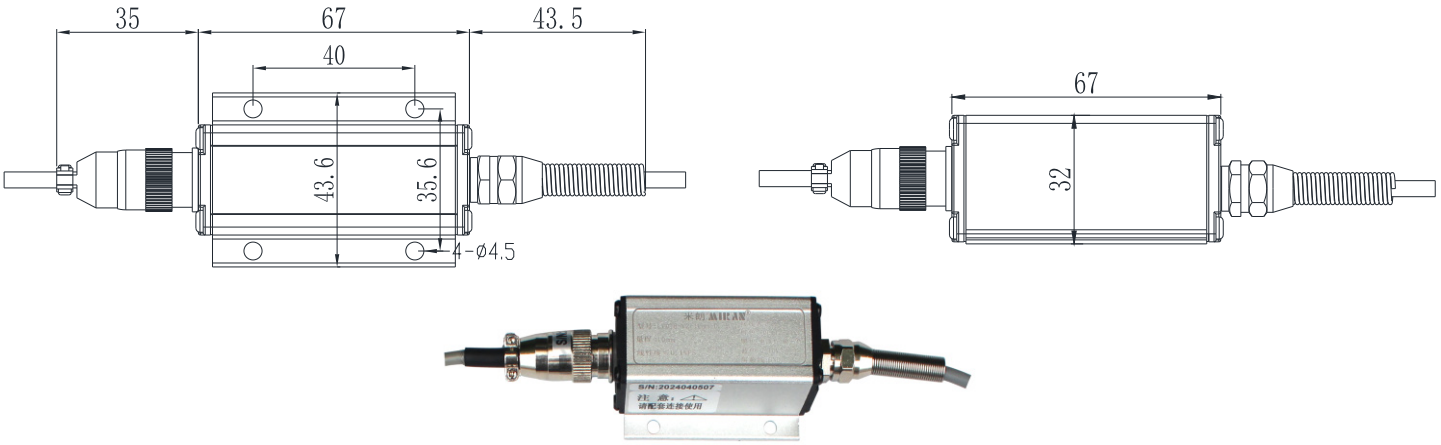
铝制安装支架-电子仓ϕ22（选配）
aluminum mounting support - electronic silo ϕ22 (optional)



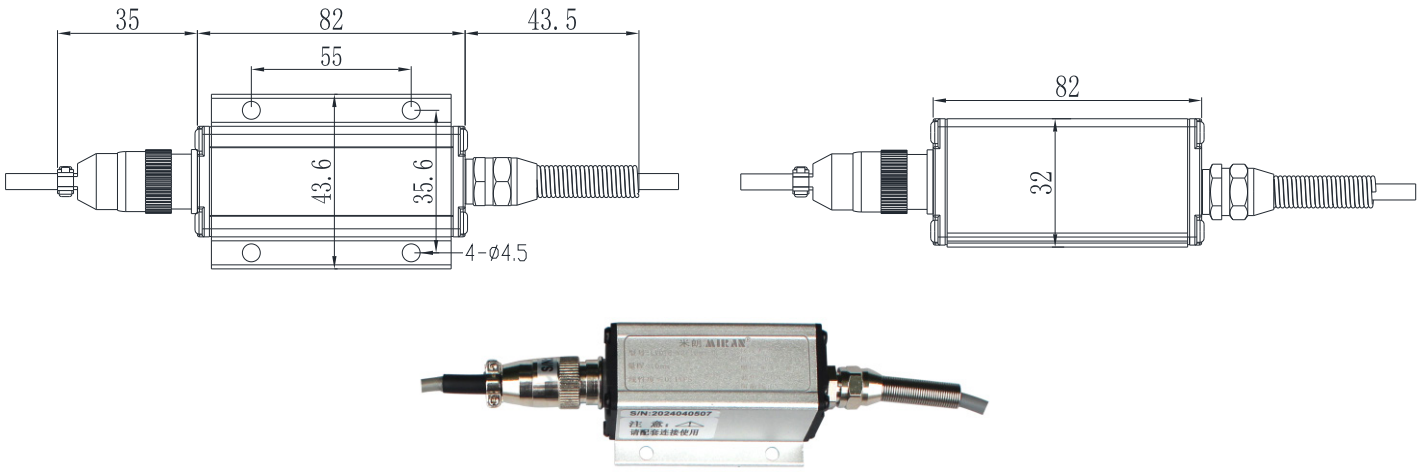
B型电子仓
Type B electronic warehouse

新款B型电子仓(默认)
New type B electronic silo (default)

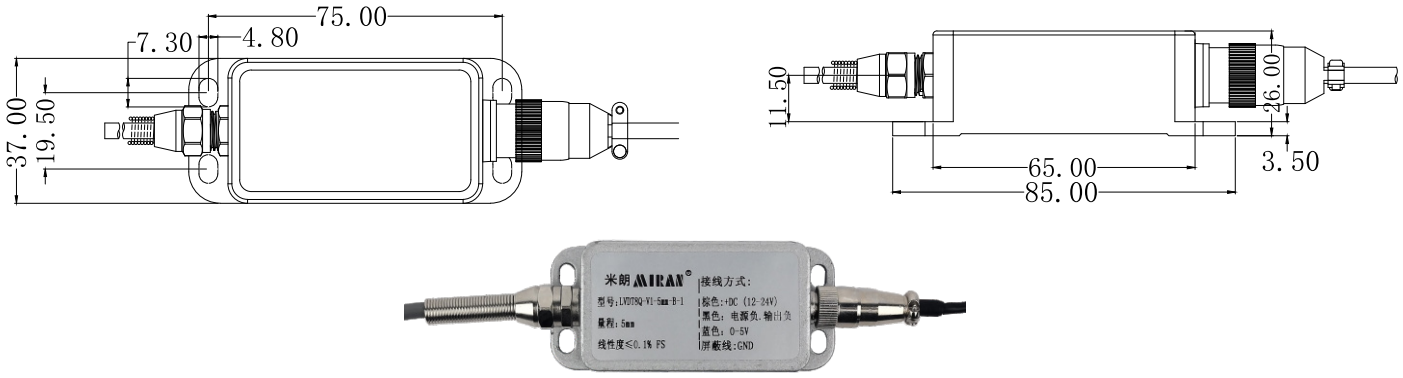
模拟量信号
Analog signal



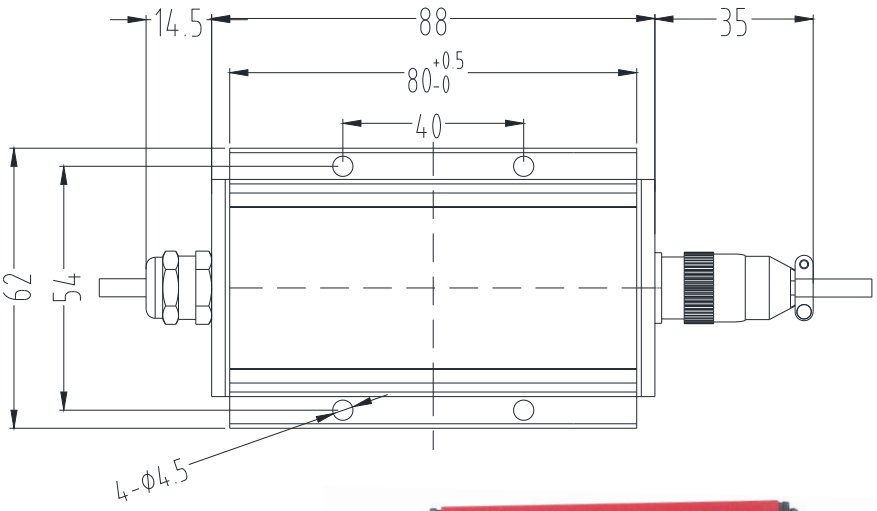
数字量信号
Digital signal

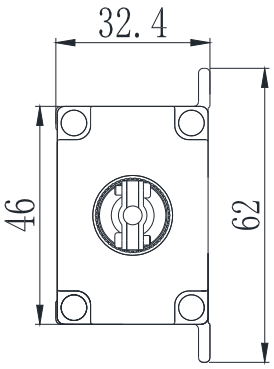


旧款B型电子仓(可选)
old type B electronic silo (optional)



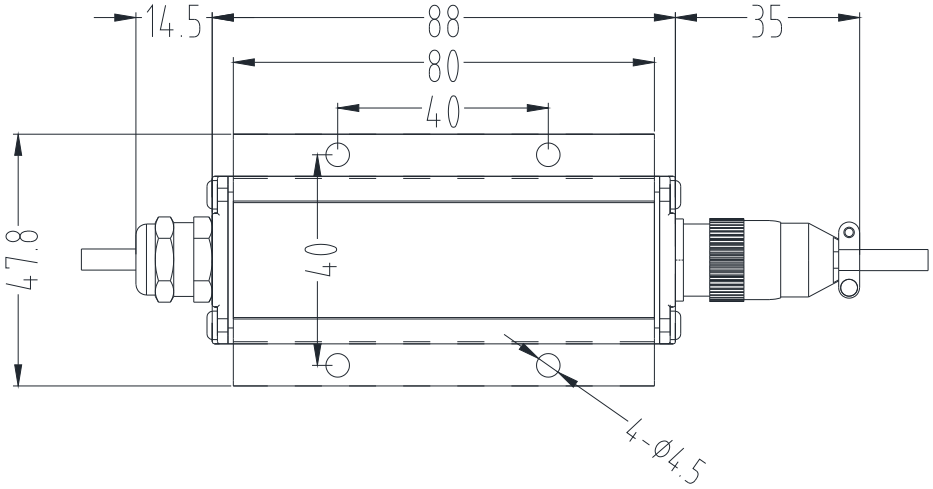
四线制C型电子仓Four-wire C-type electronic warehouse

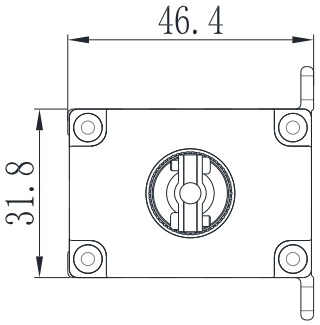






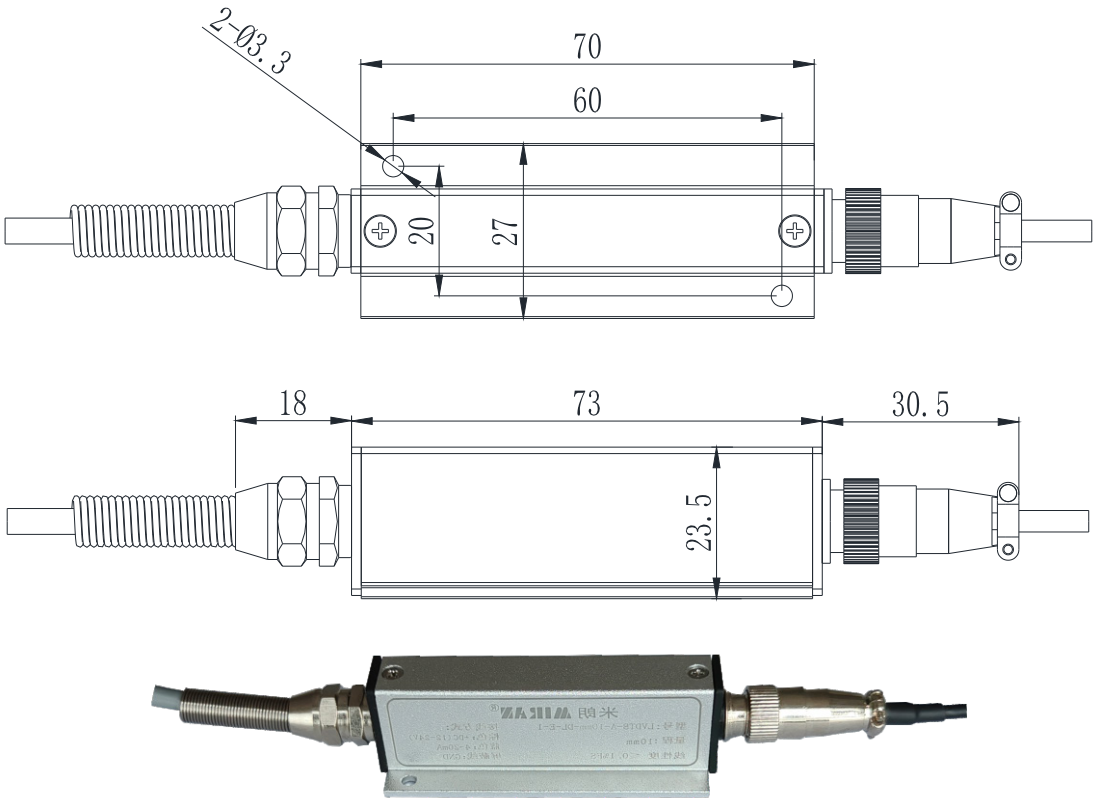
四线制D型电子仓Four-wire D-type electronic warehouse



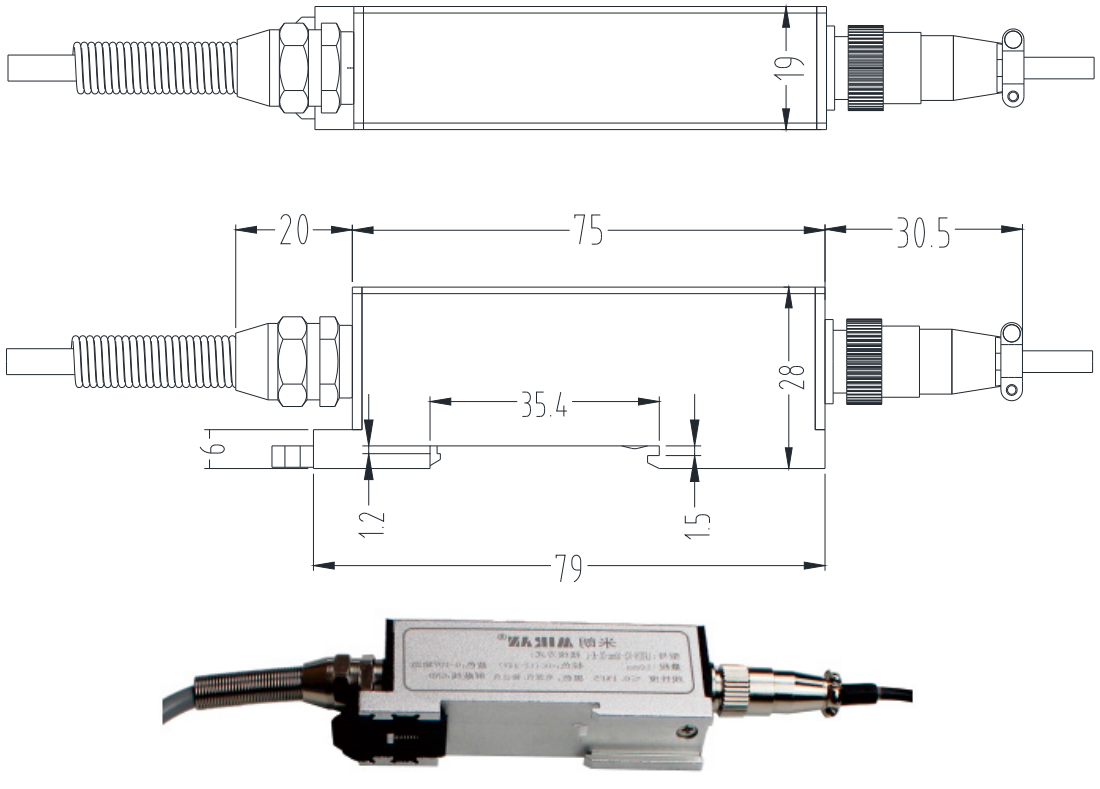




E型带耳安装式电子仓
E-type with ear-mounted electronic compartment



K型导轨卡扣式电子仓
K-rail snap-on electronic bin



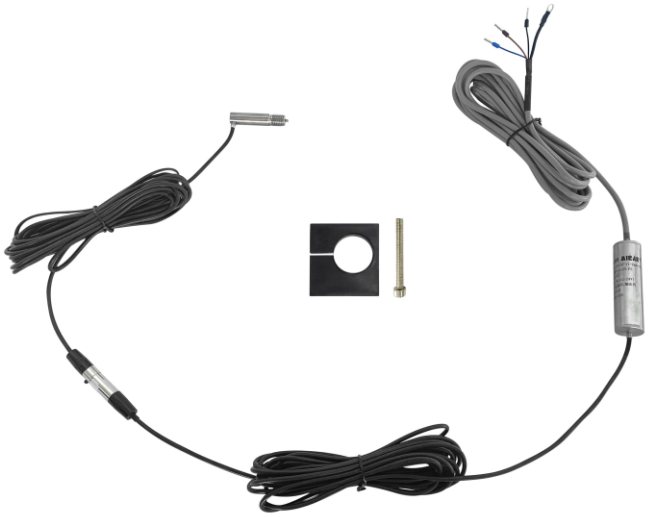
特殊定制型Special Customized Type













注:该款产品为特殊定制型LVDT位移传感器,量程2mm,0-5V信号输出,测笔分离式侧出线。
Note: This product is a special customized LVDT displacement sensor with a range of 2mm, 0-5V signal output, and a stylus with separate side outlet.

测笔直径为10mm,测笔总长为50mm,测笔前端配有M10的螺纹,安装方便,尺寸小巧。
The stylus has a diameter of 10mm and an overall length of 50mm, with an M10 thread on the front of the stylus for easy installation and compact size.

客户如有特殊定制要求均可联系我司工作人员洽谈,可根据客户需求特殊定制。
Customers who have special customization requirements can contact our staff to discuss, according to customer demand for special customization.

出厂检测报告Factory Inspection Report

湖北米朗科技股份有限公司

LVDT检测报告

一、检测对象

产品名称	产品型号	量程	线性范围	供电范围
笔式LVDT8电压型	LVDT8-V2-5mm-DL-A-1	5mm	1.0mm-6.0mm	DC12-24V

二、检测工具

五位半数字万用表，直流稳压电源，滚珠螺杆与线性滑轨模组平台及光栅尺数显装置。

三、检测数据

温度： 25 ℃ 供电： 24±0.01 VDC 编号： 2024010050 日期： 2024/01/05

四、接线方式：

棕色：供电电源（+DC12-24V）

黑色：供电电源（-）信号输出（-）

蓝色：电压输出（+）

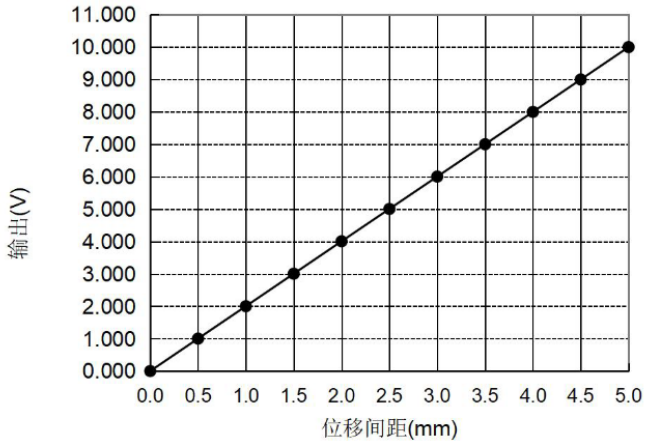
屏蔽线:GND（接大地）

◆ 电压输出型接线图:



位移间距(mm)	输出(V)
0.000	0.000
0.500	1.001
1.000	2.001
1.500	3.003
2.000	4.004
2.500	5.003
3.000	6.000
3.500	6.999
4.000	7.996
4.500	8.996
5.000	9.997

位移线性曲线图



注意！！！传感器测笔和变送器必须配套使用（测笔编号与变送器编号一致），禁止调换使用，否则传感器线性精度将严重失真！！

测试结果： 独立线性率 0.03% FS

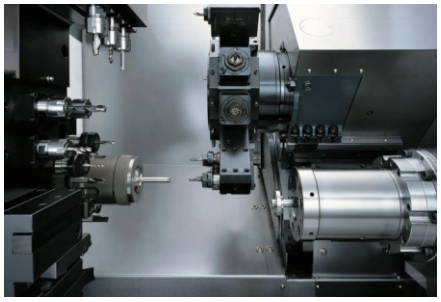
经检验该产品达到标准，准许出厂

检测员： 杜方丽 质检： 梁礼军 审核： 周秀丽

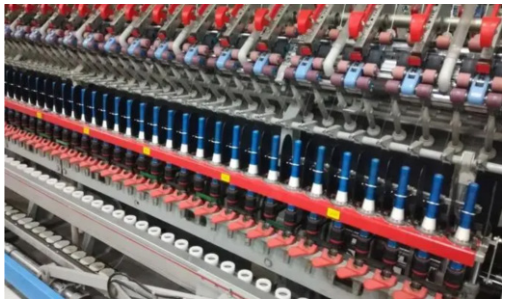
以上仅为出厂检测报告举例,传感器的型号不同,出厂检测报告中的参数也各有不同,具体参数以传感器出厂时附带的检测报告为准。

The above is only an example of the factory test report, the sensor model is different, the parameters in the factory test report are also different, the specific parameters to the sensor factory test report shall prevail.

应用领域Areas of application



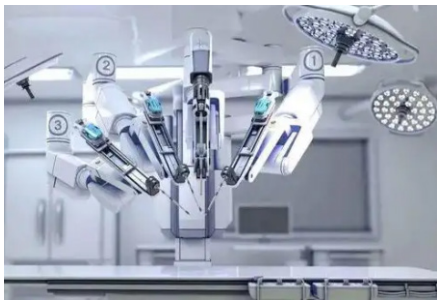
• 轴径跳动检测
Shaft diameter runout detection



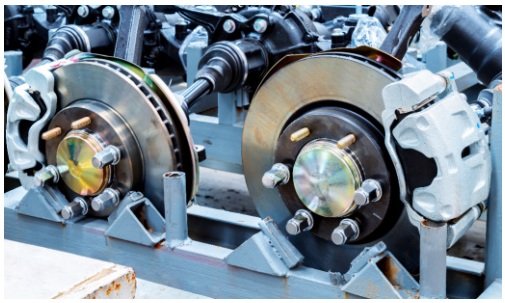
• 纺织机械检测
Textile machinery testing



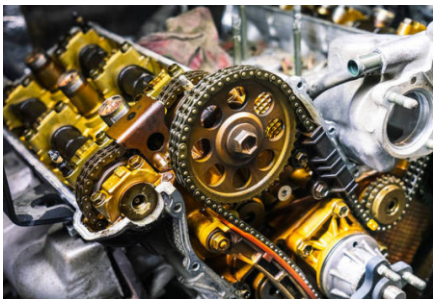
• 阀门位置检测与控制
Valve position detection and control



• 工业自动化姿态控制
Industrial automation attitude control



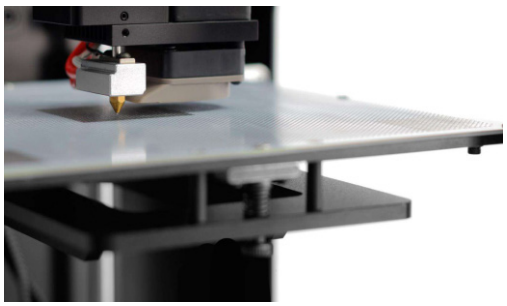
• 车辆制动装置磨损测量
Vehicle brake wear measurement



• 汽车零件检测
Automotive parts inspection



• 机床及工具定位
Positioning of machines and tools



• 精密平台自动调平
Precision platform with automatic leveling

• • •

LVDT差动变压器式位移传感器应用场所极多，随着MEMS技术的发展，LVDT位移传感器得到越来越广泛的应用。
LVDT differential transformer type displacement sensors are used in a wide variety of applications, and with the development of MEMS technology, LVDT displacement sensors are becoming more and more widely used.

适合应用于工厂、山体、铁路、隧道、船业、机械、建筑业、医疗事业、桥梁铺设、水坝建设、汽车行业、核工业和航空航天事业等。
Suitable for applications in factories, mountains, railroads, tunnels, shipping, machinery, construction, medical business, bridge laying, dam construction, automotive industry, nuclear industry and aerospace business.



辐射全国 放眼世界

Radiate to the whole country and see the world

质量第一 Quality First

用户至上 Customer First

诚信为本 Credit First

本彩页内产品尺寸，性能等参数仅作为参考，随着产品的不断更新换代，或可能有所调整改变，恕不另行通知，最终尺寸要以产品实物为准。实际产品尺寸和性能参数等，需要在实际购买的时候，与我司业务或者技术人员沟通确认最终数据，以最终书面确认的尺寸和数据为准。

（尤其是在尺寸方面要求特别严格的，或者在产品实物没收到之前，就要先在自己设备上加工做好安装孔位和确定安装空间位置的，要特别注意,要在购买前3天内与我们书面再次确认好产品的实际尺寸，以免造成不必要的返工等损失，若没有在购买前3天内与我们书面确认尺寸而造成后续安装困难等损失，我司不予承担，最终尺寸要以产品实物为准。）

将致力于位移、物位、角度等测控领域

Will be committed to the field of displacement, level, angle measurement and control

为客户提供一站式解决方案的产品与服务

Products and services that provide one-stop solutions for our customers

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20261001-LVDT位移传感器彩页
20261001 - LVDT displacement sensor brochure

主要著作人：王工
Main author: Wang designer

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