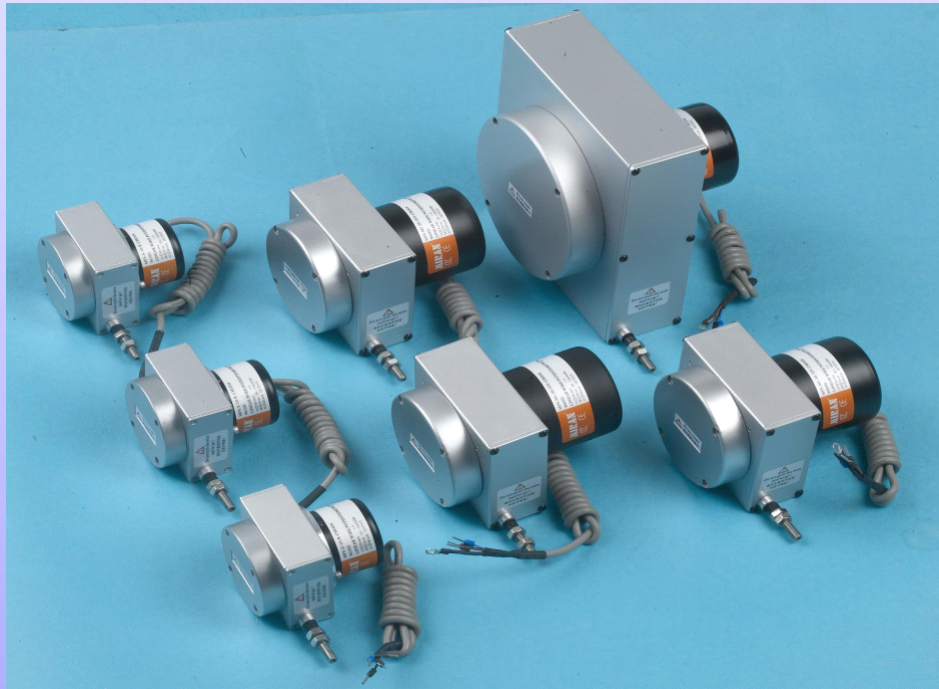


COROUR

Science Leads
the Future

深圳市加瑞尔科技拉绳位移传感器全系列

LINEAR WIRE POTENTIOMETER/ENCODER SERIES



加瑞尔拉绳位移传感器系列产品专业制造商

COROUR TECHNOLOGY CO., LTD.

SUPPLIER OF LINEAR WIRE POTENTIOMETERS/ENCODERS



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Introduction to linear wire potentiometer /encoder

Linear wire potentiometer /encoder is a ingenious combination of rotary sensors and linear sensors ,with longer sensing scope ,same measurement precise ,smaller structure ,which are widely adopted by customers from different fields .this series of sensors have sensing scope from 200mm to 20000mm,with output of analog current signal 4~20mA , analog voltage signal 0~5V or 0~10V and digital pulse A、B、Z phase signal output.

OEM orders are warmly welcome 。

拉绳位移传感器是一款安装方便，简单应用的高精度，高稳定性，的传感器。它采用一体式的铝合金结构，轻便，坚固，主要传感器件采用美国 BOURNS 多圈电位器，耐磨，线性精度，重复性精度，及阻抗特性方面均高度可靠，同事带有绝对值和增量编码器型输出方式，两部分的紧密配合，既保证产品的可靠性，又同事输出高精度的方波与数字信号。最高精度有可达到 0.01%

FOR INSTALLATION

- 1.To install stainless steel wire ,the angle of wire should be got proper and minimal,the allow tolerance is at $\pm 3^{\circ}$.**
- 2.To make sure that the hook of the stainless steel wire does not exceed the measurement range ,otherwise ,the wire will be to break off or you will get inferior accuracy.**
- 3.The wire is stainless steel with fluorin coating.You will get inferior accuracy if the wire is damaged or stretched excessively.**
- 4.You can move the linear sensor instead of the wire.**
- 5.If your application is not linear motion,please set the pulley to smooth the rotation.**
- 6.If the products work under serious environments,such as oil,water ,heavy dust,iron chipping or shavings or any powder can cause to hurt the wire,please make more protective cover or other equipment.**
- 7.The acceleration for CPS-S-P and CPS-M-P series is under 1m/sec.max;the acceleration for CPS-L-P and CPS series is under 0.5m/sec.max.**

安装注意事项

1. 利用底部 4 个固定螺丝孔, 依现场及机器安装空间设施需要, 直接安装或另加保护或其他机械使用.
2. 不锈钢索安装时, 须注意水平角度, 亦即尽量使钢索由出线口至移动部位之机构, 于工作时水平滑动, 保持最小角度 (容许偏差 $\pm 3^{\circ}$) 以确保量测精度及钢索之寿命.
3. 钢索本体是不锈钢加涂氟层, 请勿让其受外力的割伤、烧损、撞击等不当之事发生: 过量的粉尘、积屑或是足以破坏钢索的物品贮留于内部的滑轮或出线口将造成钢索破损, 导致运转不顺的故障.
4. 未安装于工作台或固定台前, 请勿用手或是其它产品将钢索拉出并让其瞬间自行弹回. 此举将造成钢索断裂, 伤害本体结构及人身安全.
5. CPS-S 和 CPS-M 系列产品的往复运动的瞬间加速绝对不可超过 1 米 / 秒; CPS-L 和 CPS-L-P 系列产品的往复运动的瞬间加速绝对不可超过 0.5 米 / 秒; 此举将造成钢索断裂, 恕本公司不承担此范围以外的责任.
6. 若使用于非直线运动的机构, 请加装适当的滑轮运转.
7. 若使用于环境恶劣或特殊场合, 请自行加装保护机构或与本公司工程部、经销商洽谈、否则造成产品损坏, 本公司不予以负责.

选型说明 ordering instruction

CPS--L--500-----R

Add information:附加信息

Output mode 输出信号模式:

R:resistance output 电阻输出型

V1:voltage output within 0-5VDC 电压输出型
0-5VDC

V2:Voltage output within0-10VDC 电压输出型
0-10VDC MA: current output with 4-20mA
电流输出型 4-20mA

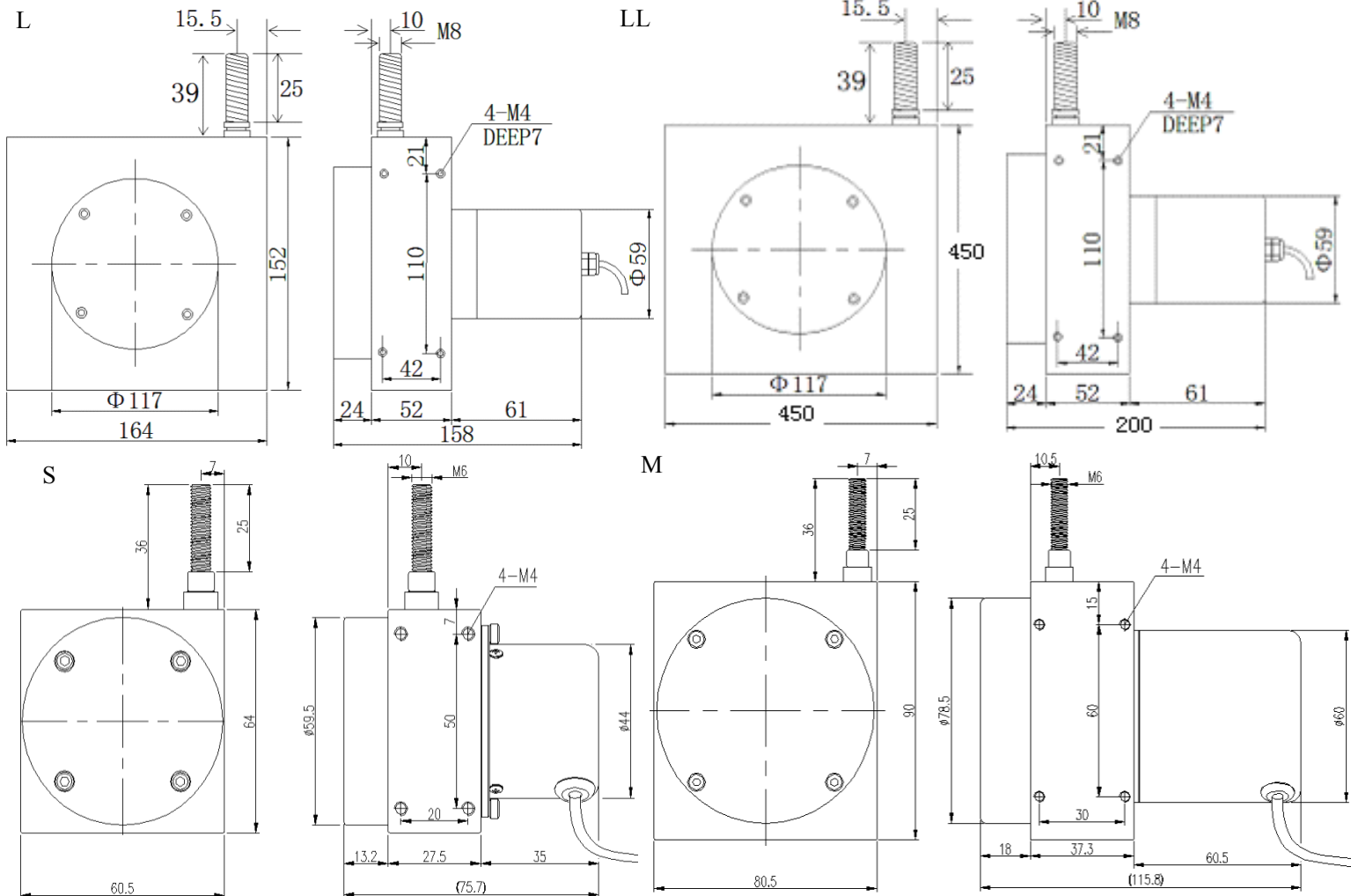
P:incremental pulse phase output AB phase or
ABZ phase,增量型方波输出 AB 相或 ABZ 相

Effective measurement range 有效量测行程

Installation model 安装机座型号 L:大型 M: 中型 S: 小型

CPS:Linear wire potentiometer/encoder Mark 加瑞尔科技拉绳尺标志

Installation model 安装机座型号:



CPS-S-R(V,MA)系列产品



--PRECISION ELECTRIC RESISTANCE SIGNAL OUTPUT

--SUITABLE FOR SHORT TO MEDIUM MEASUREMENT RANGE

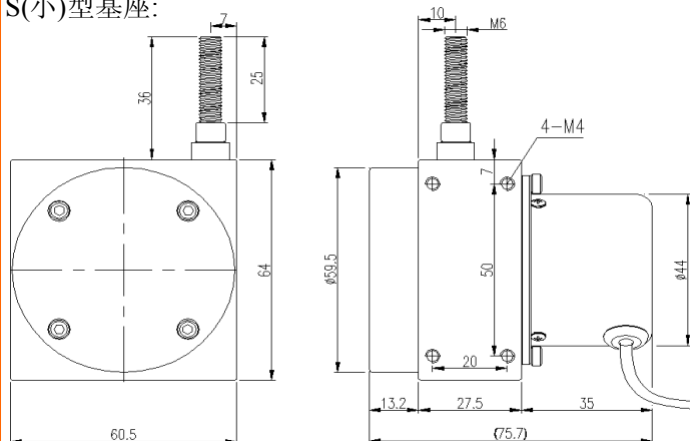
Effective Stroke(mm)量测行程	(100mm~1000mm)之间量程任意可选
Output Signal Mode 输出信号模式	Resistance(Potentiometer) 0-10V, 0-5V,4-20mA
Linearity 线性度	$\pm 0.25\%FS$ (standard class); $\pm 0.10\%FS$ (precision class)
Repeatability 重複性	$\pm 0.02\%FS$
Resolution 解析	Essentially infinite 本质无穷
Sensor 传感器	Wire-winding and hybrid potentiometer 绕线混合电位器
Input Resistance 输入电阻值	5Kohm $\pm 10\%FS$ (standard class), $\pm 5\%FS$ (precision class)
Recommended Input Voltage 输入电压	30VDCmax.,best voltage at5/10Vdc
Power Rating(watts)额定功率	Wat70℃
Max.Measuring Wire Velocity(go and back)最大往复速度	600mm/sec
Starting force 拉力	$\leq 2200g$
Measurement Wire 线径规格	Diameter 1mmSUS304 with fluor in-coated
Weight 重量	$\leq 3500g$
Operating Temp.工作温度	0℃~+70℃
Storage Temperature 储存温度	-20℃~+80℃
Vibration 震动	10Hz to 2000Hz
Protection 保护等级	IP65(for pot .housing only)

ORDERING INFORMATION 订货须知:

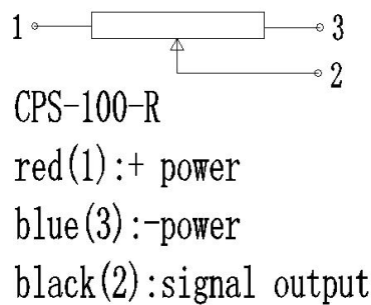
CPS-L	Measuring Range 量测行程	Signal Mode 信号模式	Life 寿命及线性度
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INSTALLATION ANDCONNECTS 安装及接线方式:

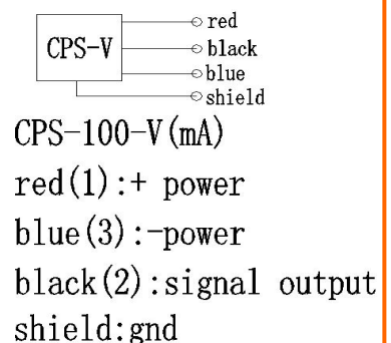
S(小)型基座:



电阻输出型接线方式:



电压电流输出型接线方式:



CPS-M-R(V,MA)系列产品



--PRECISION ELECTRIC RESISTANCE SIGNAL OUTPUT

--SUITABLE FOR SHORT TO MEDIUM MEASUREMENT RANGE

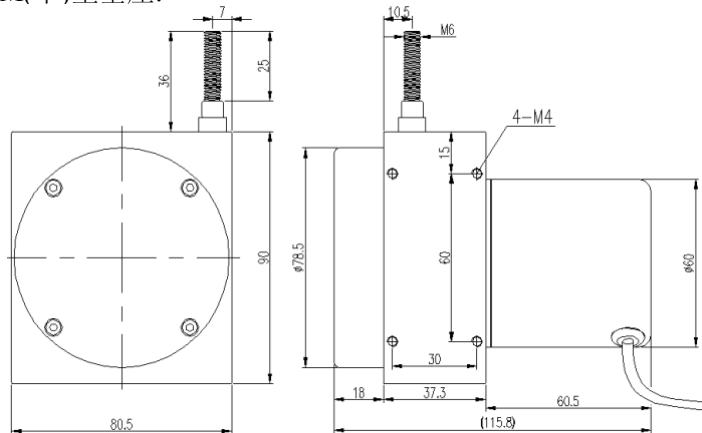
Effective Stroke(mm)量测行程	(500mm~10000mm)之间量程任意可选
Output Signal Mode 输出信号模式	Resistance(Potentiometer) 0-10V, 0-5V,4-20mA
Linearity 线性度	$\pm 0.25\%FS$ (standard class); $\pm 0.10\%FS$ (precision class)
Repeatability 重复性	$\pm 0.02\%FS$
Resolution 解析	Essentially infinite 本质无穷
Sensor 传感器	Wire-winding and hybrid potentiometer 绕线混合电位器
Input Resistance 输入电阻值	5Kohm $\pm 10\%FS$ (standard class), $\pm 5\%FS$ (precision class)
Recommended Input Voltage 输入电压	30VDCmax.,best voltage at5/10Vdc
Power Rating(watts)额定功率	Wat70℃
Max.Measuring Wire Velocity(go and back)最大往复速度	600mm/sec
Starting force 拉力	$\leq 2200g$
Measurement Wire 线径规格	Diameter 1mmSUS304 with fluor in-coated
Weight 重量	$\leq 3500g$
Operating Temp.工作温度	0℃~+70℃
Storage Temperature 储存温度	-20℃~+80℃
Vibration 震动	10Hz to 2000Hz
Protection 保护等级	IP65(for pot .housing only)

ORDERING INFORMATION 订货须知:

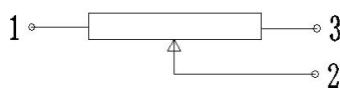
CPS-L	Measuring Range 量测行程	Signal Mode 信号模式	Life 寿命及线性度
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INSTALLATION ANDCONNECTS 安装及接线方式:

M(中)型基座:



电阻输出型接线方式:



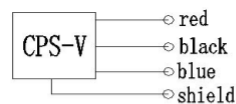
CPS-100-R

red(1):+ power

blue(3):-power

black(2):signal output

电压电流输出型接线方式:



CPS-100-V(mA)

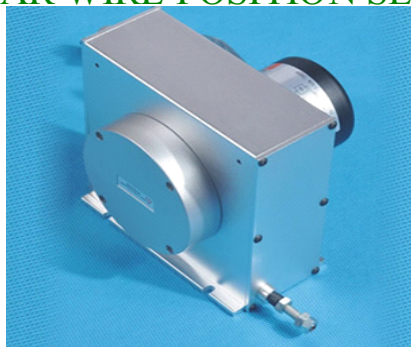
red(1):+ power

blue(3):-power

black(2):signal output

shield:gnd

CPS-L-R(V,MA)系列产品



--PRECISION ELECTRIC RESISTANCE SIGNAL OUTPUT
--SUITABLE FOR SHORT TO MEDIUM MEASUREMENT RANGE

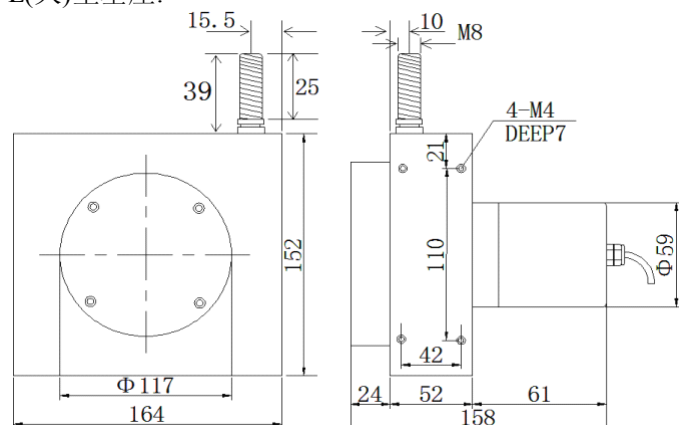
Effective Stroke(mm)量测行程	(5000mm~50000mm)之间量程任意可选
Output Signal Mode 输出信号模式	Resistance(Potentiometer) 0-10V, 0-5V,4-20mA
Linearity 线性度	±0.25%FS(standard class);±0.10%FS(precision class)
Repeatability 重複性	±0.02%FS
Resolution 解析	Essentially infinite 本质无穷
Sensor 传感器	Wire-winding and hybrid potentiometer 绕线混合电位器
Input Resistance 输入电阻值	5Kohm±10%FS(standard class),±5%FS(precision class)
Recommended Input Voltage 输入电压	30VDCmax.,best voltage at5/10Vdc
Power Rating(watts)额定功率	Wat70℃
Max.Measuring Wire Velocity(go and back)最大往复速度	600mm/sec
Starting force 拉力	≦ 2200g
Measurement Wire 线径规格	Diameter 1mmSUS304 with fluor in-coated
Weight 重量	≦3500g
Operating Temp.工作温度	0℃ ~+70℃
Storage Temperature 储存温度	-20℃ ~+80℃
Vibration 震动	10Hz to 2000Hz
Protection 保护等级	IP65(for pot .housing only)

ORDERING INFORMATION 订货须知:

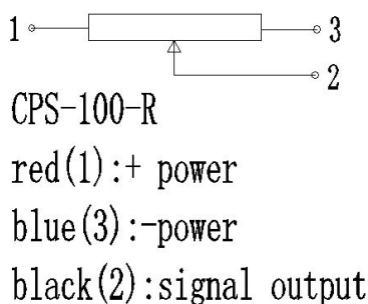
CPS-L	Measuring Range 量测行程	Signal Mode 信号模式	Life 寿命及线性度
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INSTALLATION ANDCONNECTS 安装及接线方式:

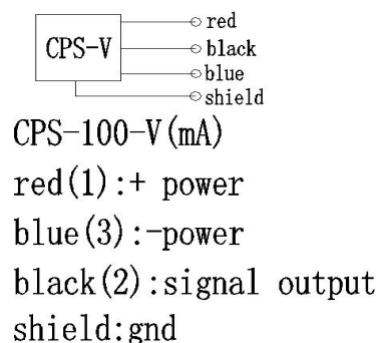
L(大)型基座:



电阻输出型接线方式:



电压电流输出型接线方式:



CPS-S-P(SS1,NPN)系列产品



--PRECISION ELECTRIC RESISTANCE SIGNAL OUTPUT
--SUITABLE FOR SHORT TO MEDIUM MEASUREMENT RANGE

Effective Stroke(mm)量测行程	(50mm~1000mm)之间量程任意可选
Detection system 检测方式	incremental 增量型 绝对值型
Output wave 输出波形	Square Wave 方波
Accuracy 精度	±0.05%FS,±1count
Resolution(mm/Pulse)解析	1, 0.5, 0.2, 0.1, 0.04, 0.01
Output phase 输出相	AB phase or ABZ phase
Electronics 电路特性	电压型,Open Collector 电流型,Push Pull 推挽式,差动式
Power supply 工作电压	DC12-28V ,DC5Vfixed
Current consumption 消耗电流	≅ 30mA
Output Capacity 输出容量	Sync .current:20mA, Residual voltage:0.5 V or less
Max Response 最大响应频率	10kHz~180kHz
Phase different 相位差	A, Bphase different 90°±45° (T/4±T/8), Zphase T±T/2
Wave Form Rise/Fall 波形上下时间	2us or less
Max.Measuring Wire Velocity(go and back)最大往复速度	1000mm/sec
Starting force 拉力	≅ 2200g
Measurement Wire 线径规格	Diameter 1mmSUS304 with fluor in-coated,DIA:1.0mm
Weight 重量	≅ 3500g
Operating Temp.工作温度	0°C ~+70°C
Storage Temperature 储存温度	-20°C ~+80°C
Vibration 震动	10Hz to 2000Hz
Protection 保护等级	IP65(for pot .housing only)

ORDERING INFORMATION 订货须知:



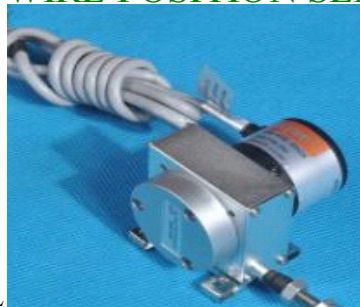
INSTALLATION ANDCONNECTS 安装及接线方式:

S(小)型基座:

脉冲输出接线方式:

CPS-100-P
red :+ power
black:-power
green:A yellow:B blue:Z
shield:gnd

输出信号波形图:



CPS-M-P(SSI,NPN)系列产品

--PRECISION ELECTRIC RESISTANCE SIGNAL
 --SUITABLE FOR SHORT TO MEDIUM MEASUREMENT RANGE

Effective Stroke(mm)量测行程	(500mm~10000mm)之间量程任意可选
Detection system 检测方式	incremental 增量型 绝对值型
Output wave 输出波形	Square Wave 方波
Accuracy 精度	±0.05%FS,±1count
Resolution(mm/Pulse)解析	1, 0.5, 0.2, 0.1, 0.04, 0.01
Output phase 输出相	AB phase or ABZ phase
Electronics 电路特性	电压型,Open Collector 电流型,Push Pull 推挽式,差动式
Power supply 工作电压	DC12-28V ,DC5Vfixed
Current consumption 消耗电流	≦30mA
Output Capacity 输出容量	Sync .current:20mA, Residual voltage:0.5 V or less
Max Response 最大响应频率	10kHz~180kHz
Phase different 相位差	A,Bphase different 90°C±45°C (T/4±T/8),ZphaseT±T/2
Wave Form Rise/Fall 波形上下时间	2us or less
Max.Measuring Wire Velocity(go and back)最大往复速度	1000mm/sec
Starting force 拉力	≦2200g
Measurement Wire 线径规格	Diameter 1mmSUS304 with fluor in-coated,DIA:1.0mm
Weight 重量	≦3500g
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Storage Temperature 储存温度	-20°C~+80°C
Vibration 震动	10Hz to 2000Hz
Protection 保护等级	IP65(for pot .housing only)

ORDERING INFORMATION 订货须知:



INSTALLATION ANDCONNECTS 安装及接线方式:

M(中)型基座:

脉冲输出接线方式:

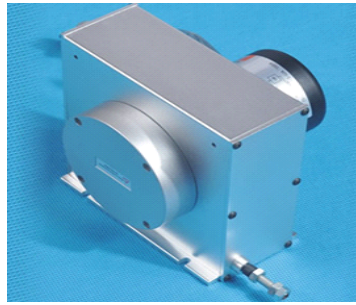
CPS-100-P
 red :+ power
 black:-power
 green:A yellow:B blue:Z
 shield:gn

输出信号波形图:

拉绳位移传感, 直线位移传感器(电子尺)专业生产商-加瑞尔科技

Tel:0755-33517796 Fax:0755-33517796 mob:15986805296

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CPS-L-P(SSI,NPN)系列产品

- PRECISION ELECTRIC RESISTANCE SIGNAL OUTPUT
- SUITABLE FOR SHORT TO MEDIUM MEASUREMENT RANGE

Effective Stroke(mm)量测行程	(5000mm~50000mm)之间量程任意可选
Detection system 检测方式	incremental 增量型 绝对值型
Output wave 输出波形	Square Wave 方波
Accuracy 精度	±0.05%FS,±1count
Resolution(mm/Pulse)解析	1, 0.5, 0.2, 0.1, 0.04, 0.01
Output phase 输出相	AB phase or ABZ phase
Electronics 电路特性	电压型,Open Collector 电流型,Push Pull 推挽式,差动式
Power supply 工作电压	DC12-28V ,DC5Vfixed
Current consumption 消耗电流	≦30mA
Output Capacity 输出容量	Sync .current:20mA, Residual voltage:0.5 V or less
Max Response 最大响应频率	10kHz~180kHz
Phase different 相位差	A,Bphase different 90°C±45°C (T/4±T/8),ZphaseT±T/2
Wave Form Rise/Fall 波形上下时间	2us or less
Max.Measuring Wire Velocity(go and back)最大往复速度	1000mm/sec
Starting force 拉力	≦2200g
Measurement Wire 线径规格	Diameter 1mmSUS304 with fluor in-coated,DIA:1.0mm
Weight 重量	≦3500g
Operating Temp.工作温度	0°C~+70°C
Storage Temperature 储存温度	-20°C~+80°C
Vibration 震动	10Hz to 2000Hz
Protection 保护等级	IP65(for pot .housing only)

ORDERING INFORMATION 订货须知:

CPS-L-

Measuring Range 量测行程

Signal Mode 信号模式

Life 寿命及线性度

INSTALLATION ANDCONNECTS 安装及接线方式:

L(大型)基座:

脉冲输出接线方式:

CPS-100-P
red :+ power
black :-power
green:A yellow:B blue:Z
shield:gnd

输出信号波形图:

Application of Linear Wire Scale

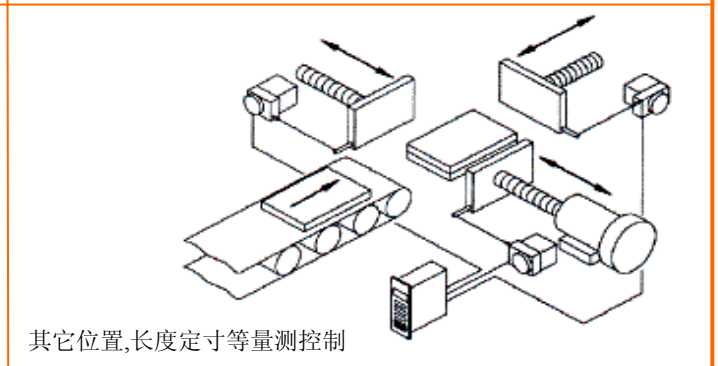
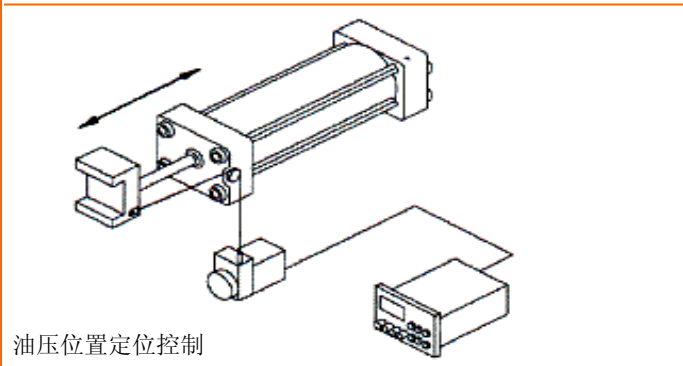
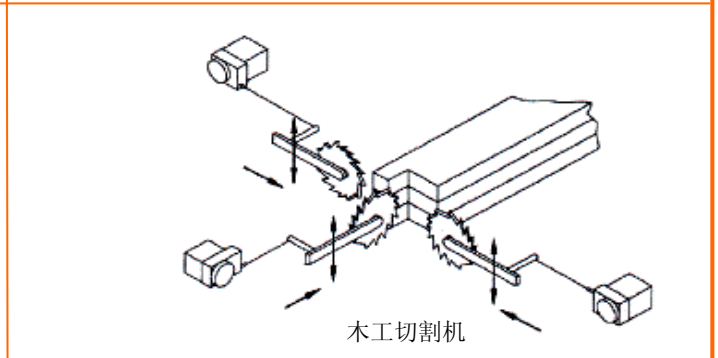
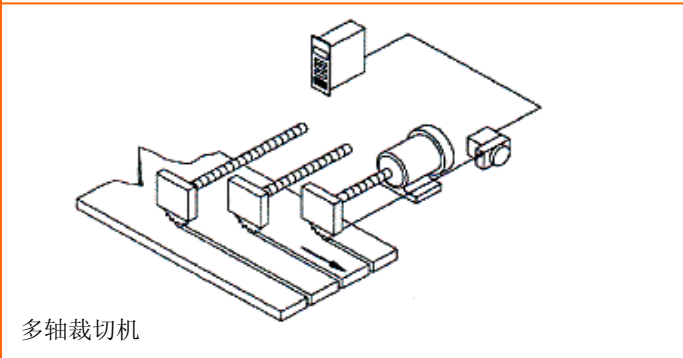
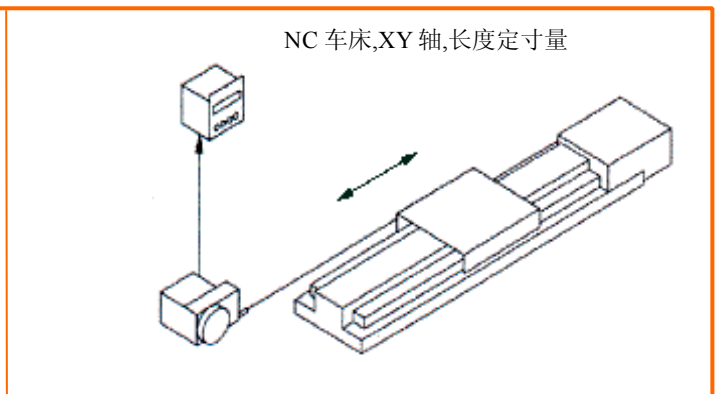
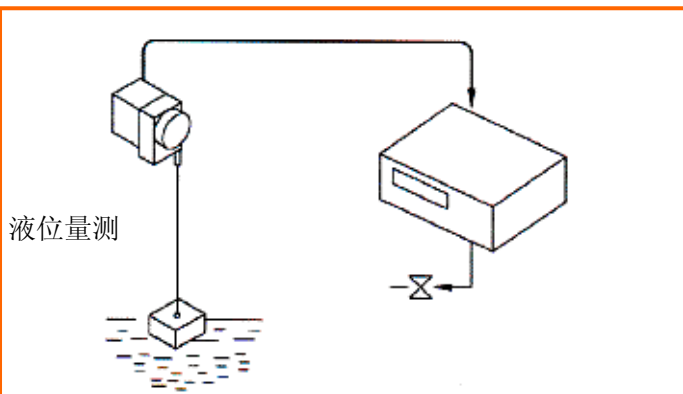
拉绳式电阻尺/编码器的应用

应用产品类别:

Application of linear wire potentiometer and encoder

storage cabinet location, reservoir dam protection, floodgate control, press machines, injection machines, level control, suspension stroke control, construction machinery, seaport machinery, industrial robots, etc

仓储位置定位, 水库大坝保护, 闸门开度控制, 压力机械, 造纸机械, 纺织机械, 金属板材机械, 包装机械, 印刷机械, 水平控制仪, 建筑机械, 工业机器人, 射出机, 木工机械, 电梯, 空气压缩机/油压机, 高度机, X-Y轴及其它长度位移, 液位等相关尺寸量测和位置控制。



深圳市加瑞尔科技有限公司

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