SLP33xD-IOL Smart Single Point Load Cell Quick Guide



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#### **Precautions before installation**

1. Please keep all technical documents



Model	Number of bolts	Bolt Size	Spacer Thickness	Screw thread depth	Bolt Strength
SLP331D	4	M6	≥4mm	13mm	≥8.8 Class
SLP332D	8	IVIO			
SLP333D	8	M8	≥6mm	20mm	

Mounting bolts, aluminum spacers and tools for installation:











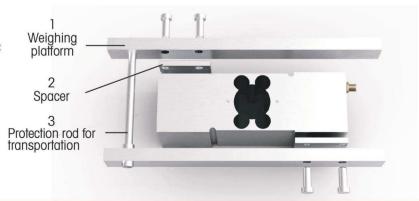
Two aluminum spacers above and below the load cell.

#### **Sensor Installation**

#### 2. Power Requirements

▶ Input voltage range : 10~30VDC

▶ Power consumption: 0.5W It is recommended to use 12 or 24V DC power supply with power  $\geq 1W$ 





(1) During transportation, it is recommended to use the original packaging, and unpack only when arriving at the site. If the load cell is installed as part of the equipment for transportation, it is necessary to add the protection rod for transportation, as shown in the figure. Remove the rod when arriving at the site.

(2) The quality of the power supply affects the accuracy of the sensor, please use the power supply that meets the standards.

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### **Sensor Installation Steps**

1. Mounting surface leveling

1mm

100mm



The maximum allowed vertical/horizontal tilt of the installation surface: 0.5° The load cell has been calibrated in the factory. After installing the load cell on a leveled surface, it can be used directly without calibration.

### **Cables and Communications**

1. Cable Definition

M12Female	M12Male	Pin	Signal	Color	
(4 3) (5) (1 2)	3 4 5 2 1	1	L+ (typ.24 VDC)	Brown	
		2	not used	White	
		3	L- (O VDC, connected to load cell body)	Blue	
		4	C/Q (IO-Link switching and communication line)	Black	
		5	not used	Empty	
)		Shielding			

Bit offset

SDCI

#### (2) Communication setting

COM3 230,400bit/s, 200 Hz update rate

### Connect the sensor

▶ Using third-party IO-Link Master to connect the sensor

Process data: 1 octet OD, 8 octets PDIn data. No PDOut.

Process data input:

PDV5 -Reserved

1 octet

PDV4 -Weighting Status 3

PDV3weighing Status 2

PDV2weighing Status 1

PDV1weighing value

... 56 55 ... 48 47 ... 40 39 ... 32 31 ... 24 23 ... 16 15 ... 8 7 ... 0 1 octet 1 octet 1 octet 1 octet 1 octet 1 octet

UIntegerT8 UIntegerT8 UIntegerT8 UIntegerT8

Float32T

1 octet

SLP33xD-IOL 单点数字式称重传感器 >> 快速安装指南

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## 1. 安装前注意事项

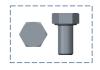
#### ① 请保留所有的技术文档





型号	螺栓个数	螺栓尺寸	垫块厚度	螺孔深度	螺栓强度	
SLP331D	4	MC	≥ 4mm	13mm		
SLP332D	8	M6			≥ 8.8 级	
SLP333D	8	M8	≥ 6mm	20mm		

您需要的安装螺栓, 铝垫块和工具。









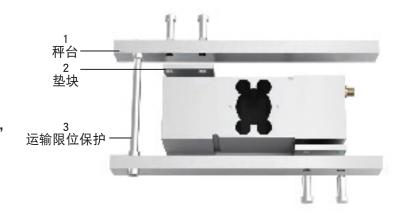


上下两个铝垫块

## 2. 传感器的安装

#### ② 电源要求

- 输入电压范围: 10~30VDC
- 功耗: 0.5W 建议使用 12 或 24V, 功率 ≥ 1W 的电源





- 运输环节,建议使用原始包装和内衬,到现场后安装。如果要装在设备上运输,需要按图3处做好运输限位保护,到现场后再拆除。
- 电源的好坏影响传感器的精度,请使用符合国标的电源。
- 螺栓进入传感器的螺孔深度要≥ 1.5 倍螺 栓直径,保证螺栓在使用过程中不松动。

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### 3. 传感器安装步骤

① 安装面调平



- 传感器在工厂已做过标定,在保证安装面水平的前提下,可以免标定,直接使用
- 安装面倾斜时, 可以使用一键快速校正功能进行修正

### 4. 电缆和通信

① 电缆定义

M12 母头	M12 公头	管脚	信号	颜色
	(3,4) (2,1)	1	L+(额定电压 24VDC)	棕色
		2	未使用	白色
$\begin{pmatrix} 4 & 3 \\ 1 & 2 \end{pmatrix}$		3	L-( 接地)	蓝色
		4	C/Q (IO-Link 通信线)	黑色
		5	未使用	空
8	8	屏蔽层		

### ② 通讯设置

默认设置: COM3

230,400bit/s, 200Hz 数据刷新率

注: 为了保护传感器, 电源的 L- 和传感器金属体相连, 所以线缆连接传感器后, L- 和屏蔽层相连。

### 5. 连接传感器

#### ① 使用第三方 IO-Link Master 读取传感器数据

数据结构: 1字节 OD, 8字节 PDIn 数据。没有

PDOut<sub>o</sub>

PDIn 数据定义:

PDV5 - PDV4 - PDV3 - PDV2 - PDV1 - Weighting Status 3 Status 2 Status 1



UIntegerT8 UIntegerT8 UIntegerT8 UIntegerT8

Float32T