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METTLER TOLEDO

SLP33xD-RTU 单点数字式称重传感器 >> 快速安装指南

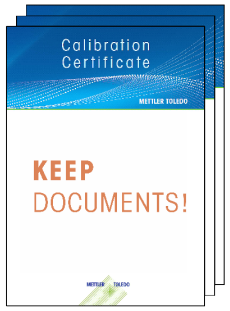
www.mt.com

欢迎添加工业微信号

微信号：MT-IND

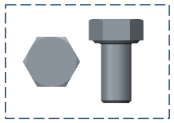
1. 安装前注意事项

① 请保留所有的技术文档

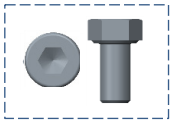


型号	螺栓个数	螺栓尺寸	垫块厚度	螺孔深度	螺栓强度
SLP331D	4	M6	⩾ 4mm	13mm	⩾ 8.8 级
SLP332D	8				
SLP333D	8	M8	⩾ 6mm	20mm	

您需要的安装螺栓，铝垫块和工具。



或

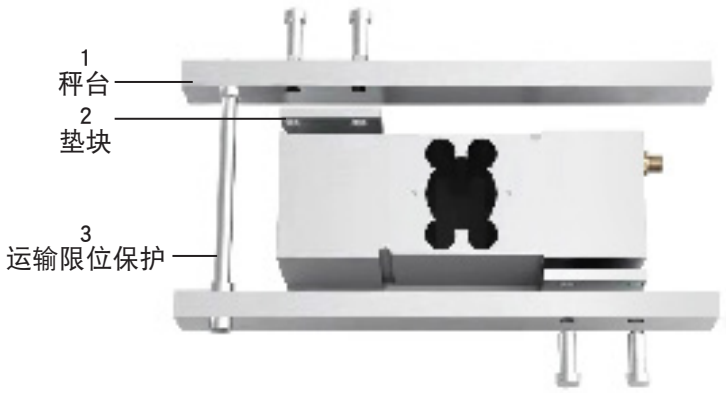


上下两个铝垫块

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

信号	电缆颜色 *	
VDC(电源)	棕色	
GND(接地)	蓝色	
RS485 A +	白色	
RS485 B -	黑色	
屏蔽	屏蔽环	

② 通讯设置

默认设置: 节点号 15，9600 波特率，8 位数据位，1 位停止位，无校验，无握手，大端字节顺序。

③ 重量读取

寄存器地址	寄存器个数	寄存器功能	状态
41001	2	读取皮重值 / 写入预置皮重	读 / 写
41003	2	读取净重值	读
41005	1	读取状态字	读
41006	1	读取 / 写入操作 - 清零、去皮、清皮	读 / 写

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

5. 连接传感器

① 使用第三方 Modbus 工具，比如 MThings，读取传感器数据

ID	名称	数值	单位	指令	写	区块	地址	数量
1	毛重	0.000000	--		写	保持寄存器（RW）	1000	2
2	净重	2000.000000	--		写	保持寄存器（RW）	1002	2
3	状态	0x1001	--		写	保持寄存器（RW）	1004	1
4	清零去皮	0x0000	--	0x20	写	保持寄存器（RW）	1005	1

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Download Installation Guide:
Installation Guide is available in:
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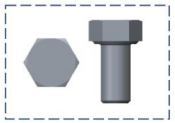
1 » Precautions before installation

1. Please keep all technical documents

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

Mounting bolts, aluminum spacers and tools for installation:



OR

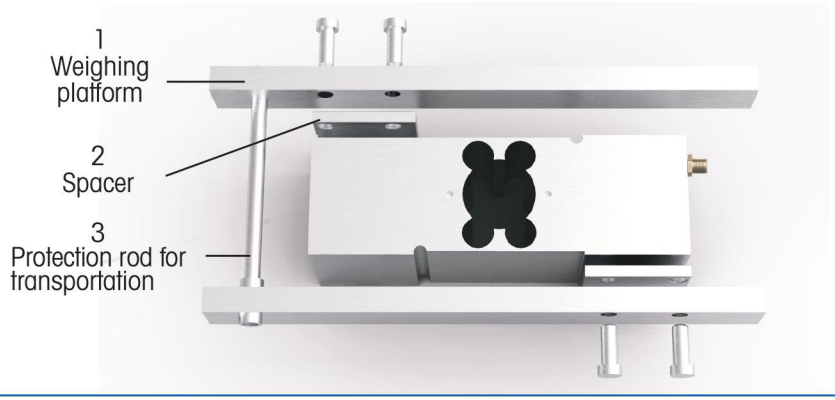
Two aluminum spacers above and below the load cell.

2 » 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 ≥ 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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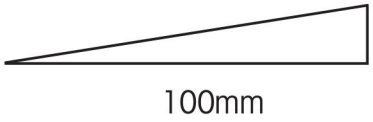
3» Sensor Installation Steps

1. Mounting surface leveling



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.

4» Cables and Communications

1. Cable Definition

M12 Connector	Pin	Signal	Cable Color*
	1	VDC (Voltage)	Brown
	2	RS485 A	White
	3	GND (Ground	Blue
	4	RS485 B	Black
	5	Empty	Empty
	Shielding		Braided tape

2. Communication settings

Default settings:
Node number 15,
Baud rate 9600,
8 data bits,
1 stop bit,
no parity,
no handshake,
big-endian byte order

3. Reading the weight value

Register Address	Number of Registers	Register Function	Condition
41001	2	Read tare value/write preset tare	Read / Write
41003	2	Read net weight	Read
41005	1	Read status word	Read
41006	1	Read/Write Operations: Zero, Tare, Clear Tare	Read / Write

5» Connect the sensor

▶ **Use third-party Modbus tools, such as MThings, to read sensor data**

ID	Name	Numerical Value	Unit	Instruction	Write	Block	Adress	Quantity
1	Gross Weight	0.000000	--		Write	holding register (RW)	1000	2
2	Net Weight	2000.000000	--		Write	holding register (RW)	1002	2
3	Condition	0X1001	--		Write	holding register (RW)	1003	1
4	Clear and Tare	0X0000	--	0x20	Write	holding register (RW)	1004	1

METTLER TOLEDO Service

Contact authorized METTLER TOLEDO service technician to activate the load cells for startup and calibration.

Contact Information:

▶ www.mt.com/contact

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