

FUNCTION 功能

- The VIGIBELT® TOUCH is a lateral movement sensor that detects run-out of elevator belts or conveyor belts, and at the same time the run-out of the lift pulley. It reacts to the pressure of the belt coming into contact with the front face of the sensor. Baffle plates are usually fitted opposite each other, preferably on the upward leg close to the pulleys for elevators, and on the load bearing side close to the drums for conveyors.

VIGIBELT® TOUCH 跑偏传感器是一款监测提升带和输送带横向跑偏和辊轮偏离的传感器。皮带跑偏时，通过皮带接触挤压传感器正面，传感器感应压力做出反应。两片传感器对称安装，适宜在提升机上升方向一侧，靠近辊轮安装；或者输送机承载面一侧，靠近辊轮安装。

The sensors can be connected directly to a PLC, or for absolutely safety, to an independent "monitoring M-JET" central unit. The electrical circuit can control an alarm or a machine shut down.

传感器可直接与 PLC 连接，或者更安全的方法是和一个独立的“集中监控系统 M-JET”连接。电路可控制警报或关闭机器。

- For elevators more than 20 meters long, we recommend fitting the head with a second VIGIBELT® TOUCH kit, still on the upward leg.

当提升机高于 20 米时，我们建议您在提升机头尾轮处各安装 1 对 VIGIBELT® TOUCH 跑偏传感器（在机筒上升方向一侧）。

- The sensors trigger when the belt applies a force of approximately 5 daN.

当皮带接触压力大于 5 daN 时，会触发传感器。

DESCRIPTION 描述

- The VIGIBELT® TOUCH kit comprises two sensors, four elastomer spacers (3mm NBR) and the fastenings (M6).

VIGIBELT® TOUCH 跑偏传感器是成对提供的，同时包含 4 片用于调节传感器触发距离的高弹性橡胶垫圈（厚度 3mm 丁腈橡胶）和螺栓（M6）。

Composition 组成部件:

2x VIGIBELT® TOUCH

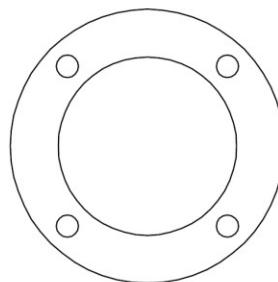
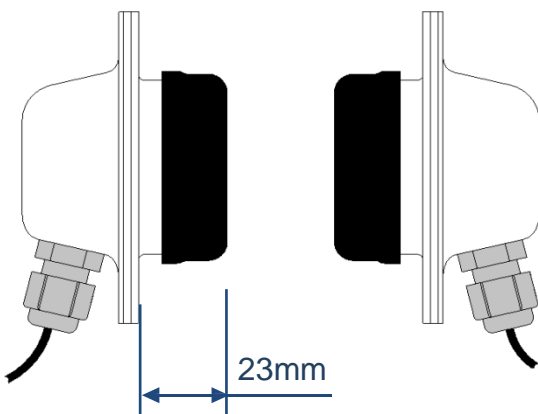
4x elastomer spacers (th.3mm)









8x mounting bolts (M6)

2x 传感器主体

4x 高弹性橡胶垫圈

8x 螺栓 (M6)



		8x
		8x
		8x
		8x

PRECAUTIONS 注意事项

The VIGIBELT® TOUCH must be installed, connected and put into service by competent personnel. The personnel should be qualified electricians and know the regulations and requirements concerning the installation of these appliances, especially when installed in ATEX areas.

VIGIBELT® TOUCH 跑偏传感器必须由专业人员进行安装、连接和投入使用。专业人员需要有电工合格证书，并且了解本产品安装的规定和要求，特别是在 ATEX 区域进行安装。

- Carry out a study prior to the electrical connection of the VIGIBELT® TOUCH sensors (standardised electrical diagram, PLC control, electricity supply and protection).
在电气安装之前需对本产品进行研究（包括标准电气连接图、PLC 控制、电压和保护等级）。
- Define the sensing distance between the belt and the elevator shaft (confirmation of the triggering distance by the person in charge of the site).
确定皮带与提升机机壳之间的检测距离（由相关负责人确定触发距离）。
- Before any installation or intervention on the VIGIBELT® TOUCH, it is essential to make sure that the bucket elevator is shut down (intervention warning to be posted on the machine).
在对 VIGIBELT® TOUCH 跑偏传感器进行安装或设置之前，必须确保提升机处于关闭状态（作业警告标示需贴于提升机设备上）。
- When the VIGIBELT® TOUCH is dismantled, the user should ensure that the appliance is scrapped properly and that the components are passed to the appropriate specialist collection centres according to their nature (stainless steel, electrical equipment, seals, etc.).
用户需合理处置被拆除的产品，根据部件的特性（不锈钢、电气设备、密封圈等）进行分类处理

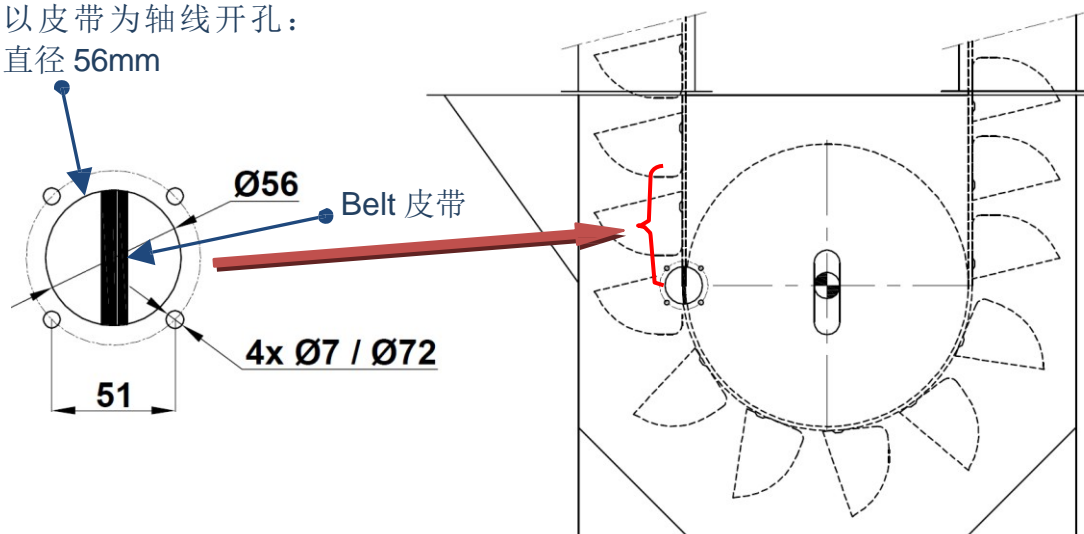
INSTALLATION 安装

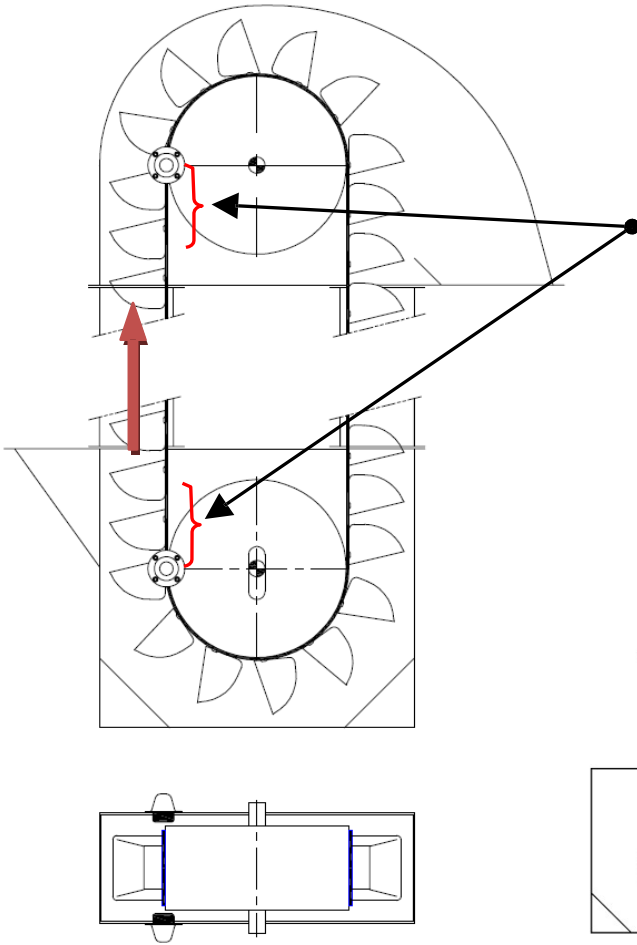
- 1) Make two symmetrical round openings on each side of the up shaft of an elevator (56mm dia. + 4 7mm dia. holes on a PCD of 72mm): **Diagram-A**
在提升机机壳上升方向一侧开 2 个对称的圆形开孔。（开孔直径为 56mm + 4 个 7mm 直径的螺栓孔，螺栓孔分布在直径为 72mm 的圆上）： **图 A**

Diagram A (图 A)

Make the 56mm opening
on the belt axis

以皮带为轴线开孔：
直径 56mm



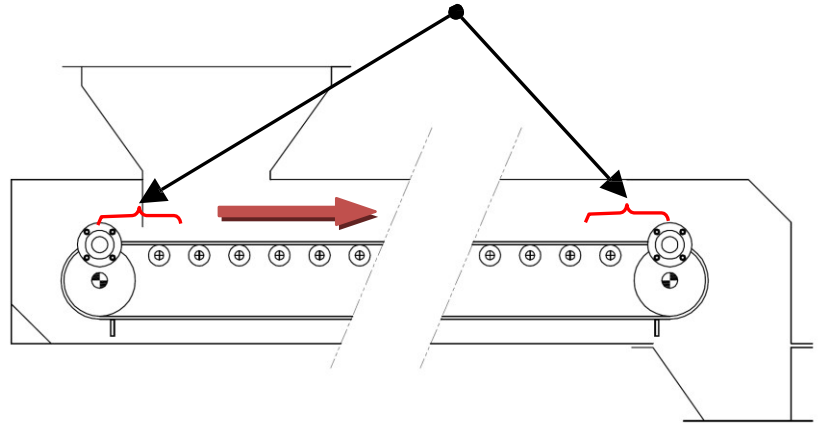


VIGIBELT® TOUCH 传感器安装在提升机上升方向一侧，以辊轮和皮带为轴心

On a bucket elevator position the VIGIBELT® TOUCH sensors on the upward leg close to the axis of the pulleys and the belt.

VIGIBELT® TOUCH 传感器安装在输送机承载面一侧，以辊轮和皮带为轴心

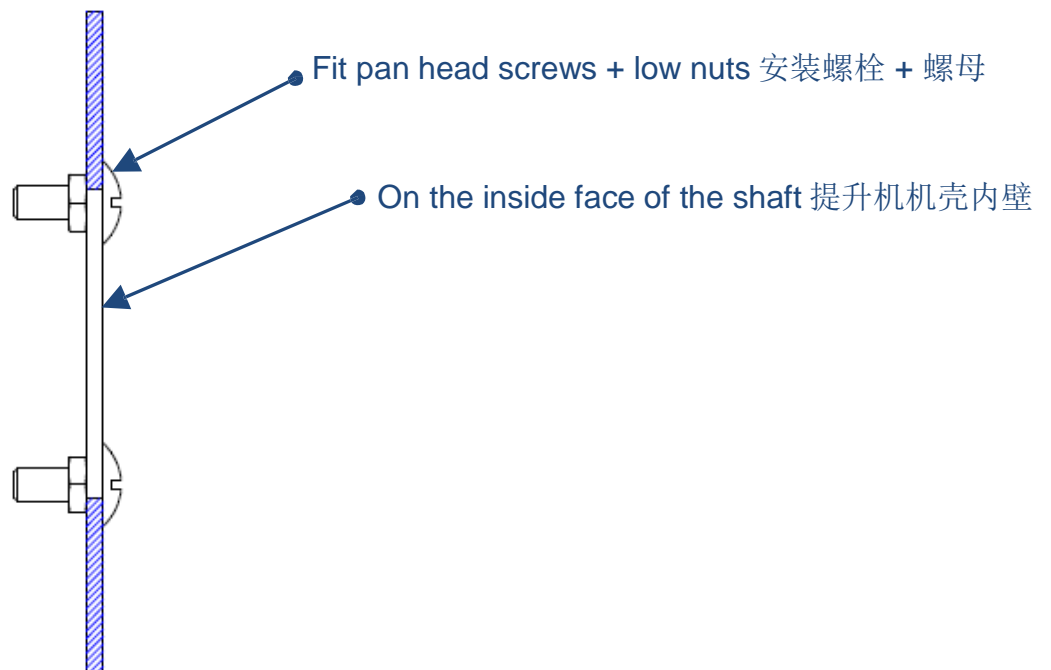
On a conveyor belt position the VIGIBELT® TOUCH sensors on the load carrying side close to the axis of the drum and the belt.



2) Fit the M6 pan head screws with the low nuts on the shaft (torque 6 N.m): **Diagram-B.**

将 M6 螺栓和螺母安装在机壳上（扭力 6 N.m）：图 B

Diagram B (图 B)



3) Adjust the triggering distance of the VIGIBELT® TOUCH sensors. This distance is the dimension between the inside face of the elevator and the contact face of the sensor.

调节 VIGIBELT® TOUCH 传感器触发距离（提升机壳内壁和传感器接触面之间的距离）。

To achieve this, three detection adjustments are possible, **diagram-C**:

三种调节距离可供选择，见图 C

No 1 - Sensor with no additional spacer, elevator thickness (e.g.: 3mm), i.e. a distance of **20mm**

第一种：不使用橡胶垫圈，如果提升机壳厚度为 3mm，那么触发距离为 **20mm**。

No 2 - Sensor with one additional spacer, elevator thickness (e.g.: 3mm), i.e. a distance of **17mm**

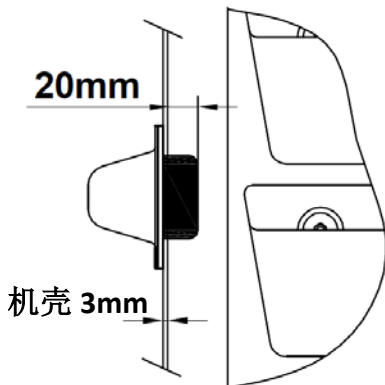
第二种：使用一片橡胶垫圈，如果提升机壳厚度为 3mm，那么触发距离为 **17mm**。

No 3 - Sensor with two additional spacers, elevator thickness (e.g.: 3mm), i.e. a distance of **14mm**

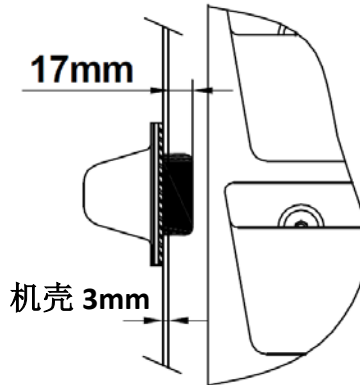
第三种：使用两片橡胶垫圈，如果提升机壳厚度为 3mm，那么触发距离为 **14mm**

Diagram C (图 C)

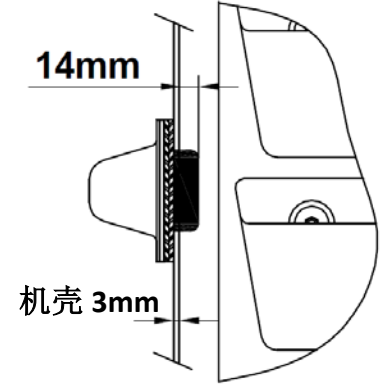
Adjustment no 1
Distance of 20mm,
With no additional spacer
第一种
触发距离：20mm
不使用橡胶垫圈



Adjustment no 2
Distance of 17mm,
with one additional spacer
第二种
触发距离：17mm
使用一片橡胶垫圈



Adjustment no 3
Distance of 14mm,
with two additional spacers
第三种
触发距离：14mm
使用两片橡胶垫圈



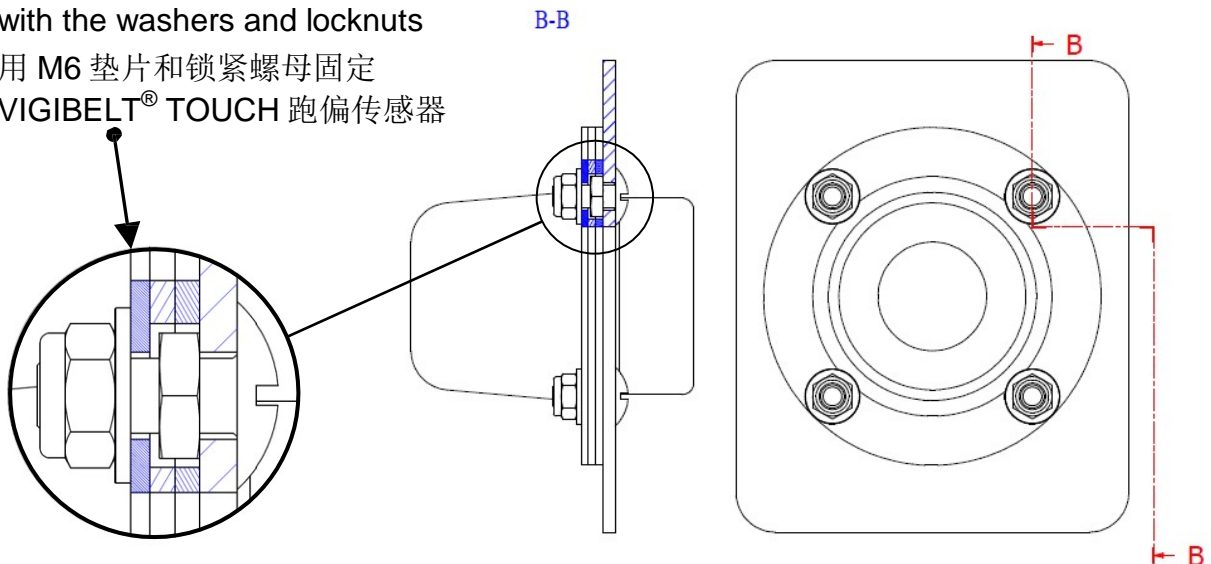
4) Position the VIGIBELT® TOUCH sensors on the openings and tighten the M6 locknuts (torque 4 N.m) according to **Diagram-D**.

将 VIGIBELT® TOUCH 跑偏传感器放置在开孔处，用 M6 垫片和锁紧螺母固定（扭力 4 N.m）见图 D:

Diagram D (图 D)

Fix the VIGIBELT® TOUCH sensor
with the washers and locknuts

用 M6 垫片和锁紧螺母固定
VIGIBELT® TOUCH 跑偏传感器



- 5) Connect the VIGIBELT® TOUCH sensors according to the electrical diagrams:
根据电路图连接 VIGIBELT® TOUCH 跑偏传感器:

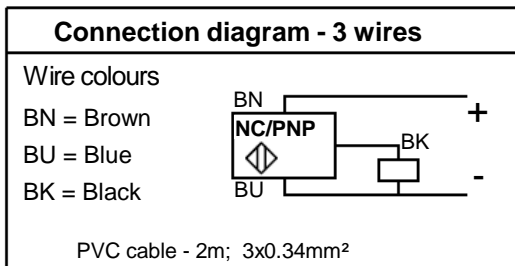
NC sensor = positive safety, continuous sensor function monitoring
NC 传感器 = 主动安全型, 持续监测传感器功能

Loss of the signal indicates a problem of
失去信号表明有以下故障

⇒ Belt run-out 皮带跑偏
⇒ Wiring open circuit 电线断路

VIGIBELT® TOUCH - 55KVT92612TE

- Connection by cable: 2 m (3 wires)
电缆长度: 2m (3线)
- Rated supply voltage: 12 to 24V DC
额定电源电压: 12-24V DC
- Voltage limits (incl. wave): 10 to 36V DC
电压限制 (包括波动): 10-36V DC
- Switching capacity in mA: <= 100 Ma
开关容量 mA: <= 100 Ma
with protection against overloads and short-circuits
带有防过载和短路保护
- Protection - IP68 according to IEC 60529
防护等级- IP68 (IEC 60529)
- Temp: -25 to +70° C
适用温度: -25 to +70° C



VIGIBELT® TOUCH - 55KVT95042ME

- Connection by cable: PVC 2 m (3 wires)
电缆长度: PVC 2m (3线)
- Rated supply voltage: 12 to 250V AC/DC
额定电源电压: 12-250V AC/DC
- Protection - IP67 according to IEC 60529
防护等级- IP67 (IEC 60529)
- NC: wire Black (1) / wire Grey (2)
常闭: 黑线(1) / 灰线 (2)
- NO: wire Black (1) / wire Blue (4)
常开: 黑线(1) / 蓝线 (4)
- Temp: -20 to +105° C
适用温度: -20 to +105° C

