

CAPACITIVE SPLICES DETECTOR MTC-3032

Application

- It's an equipment used in the paper industry.
- It can detect splices between several sheets. The range of grammage is very wide.
- The adjustment is very simple, through a preselection the sensitivity degree is decided (between 1 and 9).

Application

- The detection side has to be between 3 and 6mm. from the lower stainless steel sheet, having special care that both sides remain totally parallel.
- The equipment subjection, as well as the lower structure must have a solid subjection, without vibrations.
- The arrow indicates paper direction.
- Must be verified that a minimum section of 1,5mm of earth wire exists joining the stainless steel sheet with the 0V side MTC-3032.
- Once the mechanical and electrical connexion of the equipment is done according to attached connexions, it is proceed to its 24V DC supply.

Starting

- Has a multi-turn potentiometer in the middle of two LED diodes called BALANCE.
- With it, the moment when the LED diodes switch off has to be found. If after, any of the LED of BALANCE switch's on when putting the paper, does not matter. The important thing is to find the initial moment when the two are off. This adjustment will be necessary at the begging of the mechanic installation or when a movement or adaptation is done to the distance between the detection side and the lower stainless steel sheet.
- Check that splice signal LED turns on and that the output signal arrives correctly to the automaton input. Output regarding 0V.
- Observe the different splices, at different grammages.
- Check that at the entrance of the equipment wrinkles or bags are not formed, that could produce false faults or cause the use of very low sensitivities.

Sensitivity adjustment

- Higher number, more sensitive (splices will be detected with less thickness difference); lower number, less sensitive.
So, an overlapped splices with a high grammage 300 or 400 grams can be detected with a sensitivity close to 1; however, a splices from end to end and thin grammage of 60 grams will need a sensitivity close to 8. For this last condition is very important that paper gets in without wrinkles and that the support does not have vibrations.
- When working with different splices and grammages start with a little high sensitivity 6 or 7, observing that not false faults are produce.



- If the sides formed by the detection side and the stainless steel are not parallel, they will notably reduce the sensitivity of the equipment forcing to increase the adjustment value of the preselection.
- The more nearby the detection side is from the low part, the better splices of less thickness difference will be detected. In addition, it allows not working with very high sensitivity values.

Sensitivity adjustment

DB9 CONNECTOR: MTC-3032 CAPACITIVE SPLICES DETECTOR

