

Why Use a Signal Cable?

Safe and reliable production without unnecessary downtime is essential. That's why a Signal Cable should be used between the PLC and the control box.

To protect the motor, all our conveyors have a built-in warning system. A Signal Cable is required for the warning signal to be sent from the control box.

Connect the Signal Cable to the control box's M12 connector and to the PLC of the press or manufacturing machine. If the conveyor becomes overloaded or its tray movement is obstructed, the production line can automatically stop using the warning signal from the control box.

A Signal Cable provides safety and comfort by ensuring full control over parts output. Costly repairs to conveyors and tools can thus be avoided.

PLC Connection to the Conveyor – Auto Mode

Potential Free System

On the control box there is a silver switch that allows you to choose between Manual or Automatic operation (M12 connector).

To start the conveyor via the M12 connector (in Auto mode), an external 24 V voltage must be applied to terminal No. 1 and 0 V to terminal No. 3. If the programmed motor speed falls below 20% (Error), this external 24 V signal is sent out on terminal No. 2 and 0 V on terminal No. 3.

Terminal No. 4 outputs a signal indicating that the control box is OK and not in Error mode.

When programming an external PLC, the pickup of the error signal should include a delay of 2–3 seconds to allow the conveyor to reach operating speed.

The motor controller is programmed so that if the conveyor is mechanically prevented from operating, it automatically shuts down to protect the motor windings and sensors.

To restart after such a shutdown, the control box voltage must be cut off using the main switch for a short time before restarting the conveyor.