

One for all

Logic distributor links sensor signals and controls signal changes

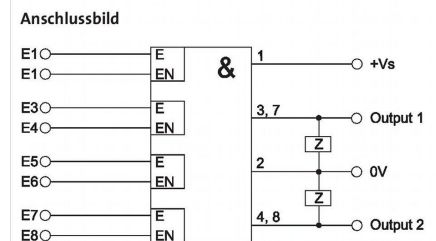
Intelligent sensor technology is also indispensable in metalworking companies. In specific applications, the signals from several sensors often have to be linked together in order to obtain a statement about the operational state e.g. of an ejection control, a feed control or a double sheet detection. If this linking is carried out in the control (unit), each individual sensor signal must be routed to the control (unit) via a line so that it can be processed by its program. The alternative: the VL300148 logic distributor from ipf electronic.



Instead of carrying out the signal linkage of several sensors in a control unit, it is often sufficient to link signals that must be present at the same time directly on site at the sensor installation point and transmit them to the control unit (unit) as one final signal. In this context, it is often important to check the input signals for a signal change so that any damaged sensors or malfunctions are recognized or to prevent material jamming and thus major damage. And these are precisely the tasks performed by the logic module from ipf electronic.

Link switching signals from up to four sensors

Up to four sensors can be connected via the logic module's inputs and their switching signals can be AND-linked with each other if the associated enabling slots have been activated via so-called simulation plugs. This is how the module actually works: switching output 1 is only activated when all enabled inputs with a status LED are carrying a HIGH signal. However, this only happens once all assigned inputs have completed a LOW-HIGH changeover. Until then, an LED and a signal on switching output 2 indicate that a signal change has not yet taken place on all inputs. If all inputs are present after a LOW-HIGH signal change, the signal on output 2 of the logic module de-energizes, the corresponding LED goes out and output 1 is set. In this case, output LED 1 lights up continuously until one of the inputs de-energizes again.



Old system, new tools? No problem

Along with the application of the logic distributor to query the operating status of a material ejector, a feed control or a double sheet query, the module can also be used in older punching systems, for example.

If new tools or multiple tools are used in such systems, the tool protection of the control (unit) is often not able to process the signals from all sensors. Here too, the logic module can be used to link and reliably control signals that are present at the same time.