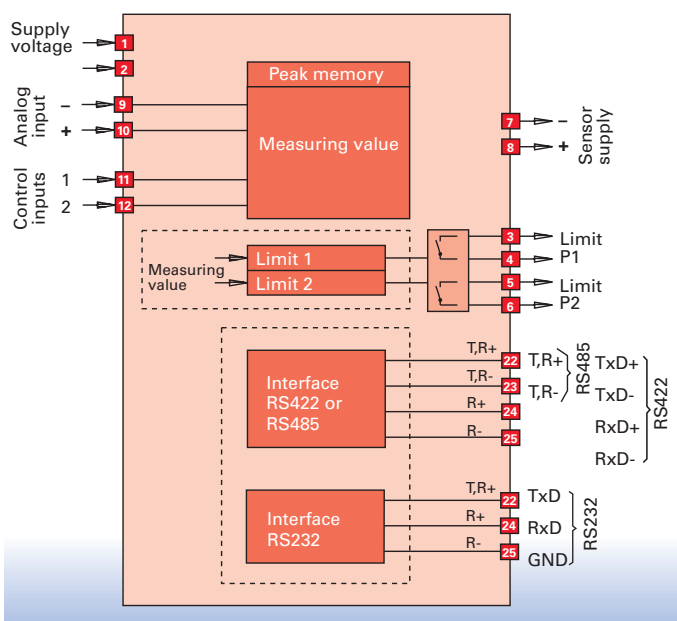




Highlights

- ▶ **6-digit LED display, 14 mm high**
- ▶ **1 analog input (current/voltage)**
- ▶ **Optional:
2 programmable limits
(relay outputs)**
- ▶ **RS485, RS422 and RS232 interface**
- ▶ **Zero point calibration**
- ▶ **Two-point calibration teach-in**
- ▶ **With peak maximum hold**

Block Diagram



Order Designation

Order No.	Interface
0	Without interface
1	RS422 / RS485
2	RS232

Analog input / Output	
0	0...10 V / without limit
1	0...20 mA / without limit
2	0...10 V / with limit
3	0...20 mA / with limit

Voltage	
1	24 / 48 VAC
2	115 / 230 VAC
3	12...30 VDC

PCD41. PX01

Technical Data

Ambient temp.	0...+50 °C
Storage temp.	-20...+70 °C
Protection	Front IP 65 to DIN 40050
Front dimension	DIN housing, 96 x 48 mm
Weight	AC version approx. 350 g DC version approx. 250 g
Display	Programmable decimal point Suppression of preceding zeros
Supply voltage	24/48 VAC ± 10 % (50/60 Hz) 115/230 VAC ± 10 % (50/60 Hz) 12...30 VDC, 5 % RW

Technical Data

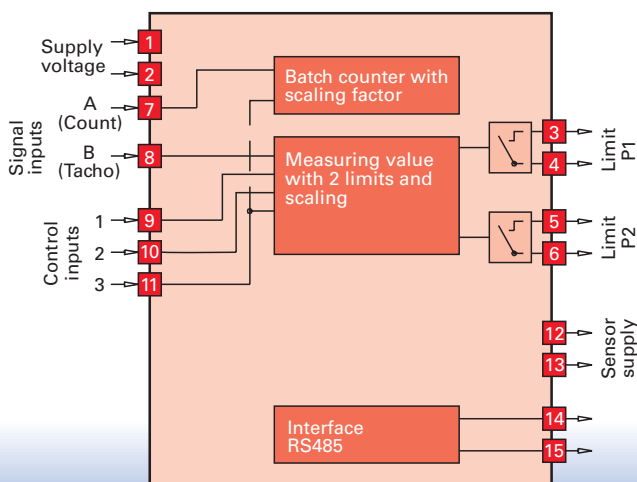
Power consumption	6 VA, 4 W
Sensor power supply	10...26 VDC, max. 85 mA
Control input	2 inputs, PNP logic
Analog input	1 input 0(2)...10 V or 0(4)...20 mA
Limit P1, P2	2 floating relays, programmable as normally closed or open
Response time	0.1...60 s programmable



Highlights

- ▶ **6-digit LED display, 14 mm high (permanently visible preselection)**
- ▶ **2 digital inputs**
- ▶ **3 programmable control inputs**
- ▶ **2 programmable limits (relay or electronic outputs)**
- ▶ **RS485 interface**
- ▶ **Additional secondary counter function**

Block Diagram



Order Designation

Order No.	Interface
0	Without interface
1	RS485
Limit outputs	
1	With relay outputs
2	With optocoupler outputs
Voltage	
1	24/48 VAC
2	115/230 VAC
3	12...30 VDC

TA134. AX01

Technical Data

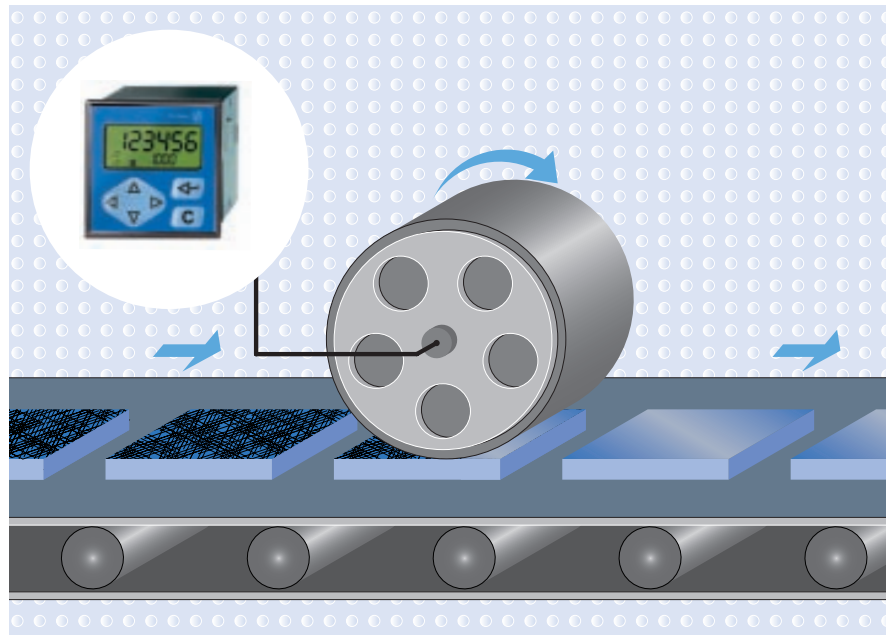
Ambient temp.	0...+50 °C
Storage temp.	-20...+70 °C
Protection	Front IP 65 to DIN 40050
Front dimension	DIN housing, 96 x 48 mm
Weight	AC version approx. 260 g DC version approx. 140 g
Display	Programmable decimal point Suppression of preceding zeros
Supply voltage	24/48 VAC ±10 % (50/60 Hz) 115/230 VAC ±10 % (50/60 Hz) 12...30 VDC ±10 %, 5 % RW

Technical Data

Power consumption	5 VA, 4 W
Sensor power supply	10...26 VDC, max. 60 mA
Signal input	2 inputs, PNP/NPN logic
Input frequency	40 kHz or 25 Hz (Tacho B) 10 kHz, 25 Hz, 3 Hz (secondary counter, Count A)
Control input	3 programmable inputs
Limit P1, P2	2 floating relays, programmable as normally closed or open or 2 optocouplers, 40 VDC, 25 mA
Response time	0.5...60 s programmable

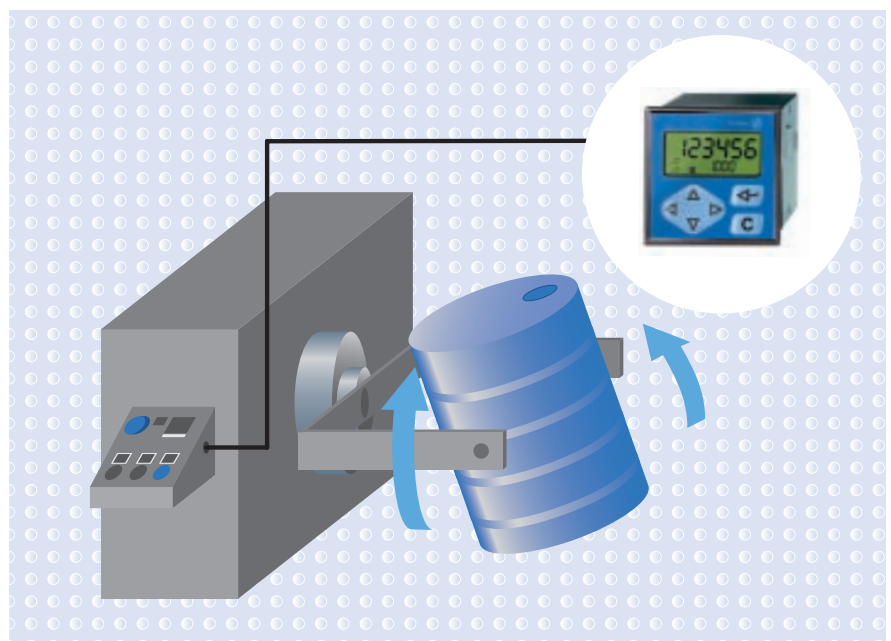
Polishing Machine

What speed is permitted is often dependent on the material used. Polishing wheels of various materials or for machining certain qualities must be operated within a specified speed range. The TA134 monitors the target value within two programmable limits. This controller is simultaneously equipped with a counter for recording the total number of rotations, e.g. for maintenance purposes.



Mixing Time Monitoring

Equipped with an internal time base, process controllers can also carry out time-dependent monitoring of processes. The BE134 offers 4 freely selectable time ranges, timer functions and limit monitoring. With barrel mixers for adding additives or solvents, the pre-contact signals the end of the mixing time, enabling the advance preparation of barrel changes. The end contact stops the process after the preselected mixing time.

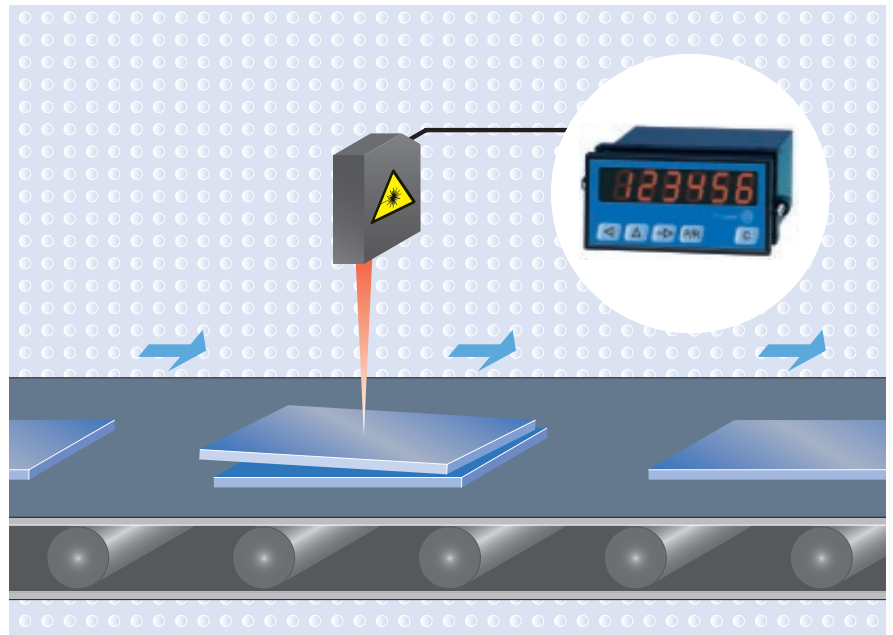


Application Characteristics

- ▶ **Detection and display of a time-related measured variable**
- ▶ **Connection for a digital sensor**
- ▶ **Switching outputs for Max./Min. monitoring**
- ▶ **Additional secondary counters for counting events**

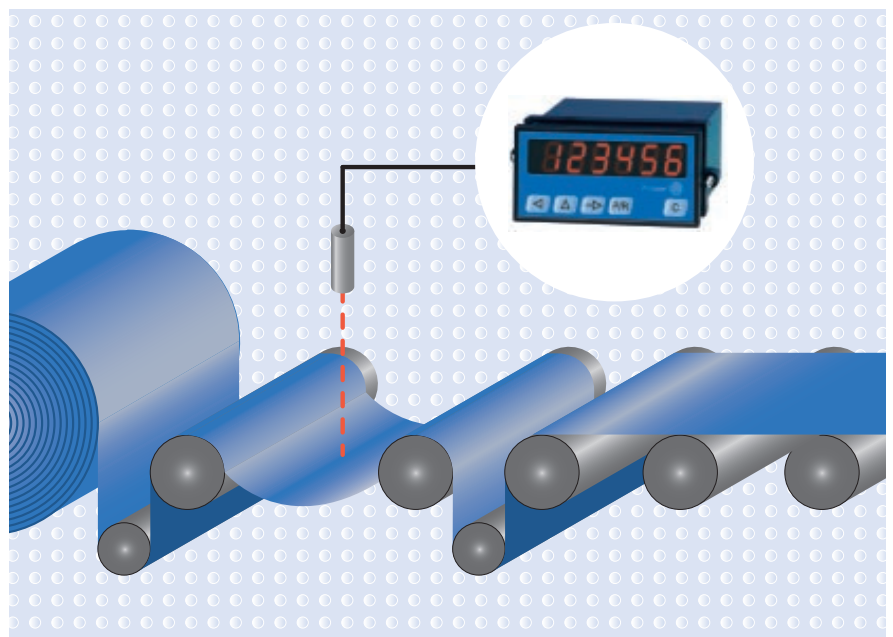
Layer Monitoring

Continuous production processes such as printing, milling, coating or punching require a reliable material feed. One possibility is double-layer monitoring with distance sensors. When the permissible material thickness is exceeded, an output signal is activated with which the feed can automatically be stopped.



Distance Monitoring

When unrolling films, sheet metal or textiles, tensile forces result that must be neutralized before the machining process. This takes place in a controlled manner within a buffer zone in which the material can sag. LED, laser or ultrasonic sensors are equally well suited for sag monitoring. The permissible tolerance range can be monitored with P1 and P2, or can be integrated in the process control system as an analog current or voltage value.



Application Characteristics

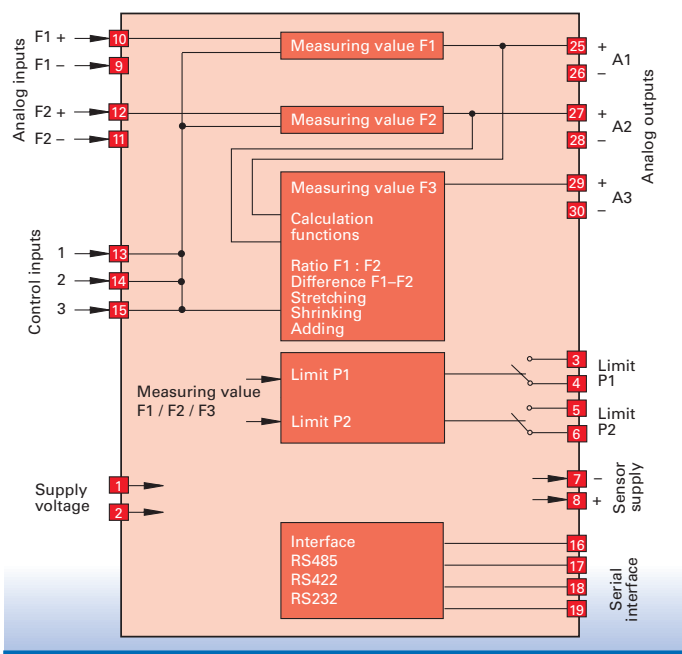
- ▶ **Detection and display of a physical measured variable**
- ▶ **Switching outputs for max./min monitoring**



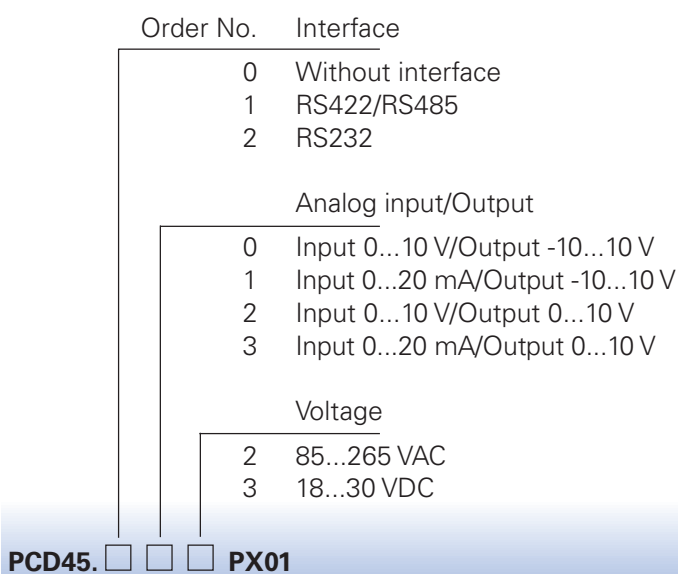
Highlights

- ▶ 6-digit LED display, 14 mm high
- ▶ 2 analog inputs
- ▶ 3 programmable analog outputs
- ▶ 2 programmable limits (relay outputs)
- ▶ Calculation functions
- ▶ RS485, RS422 and RS232 interface
- ▶ Teach-in of sensor characteristic
- ▶ With peak maximum hold

Block Diagram



Order Designation



Technical Data

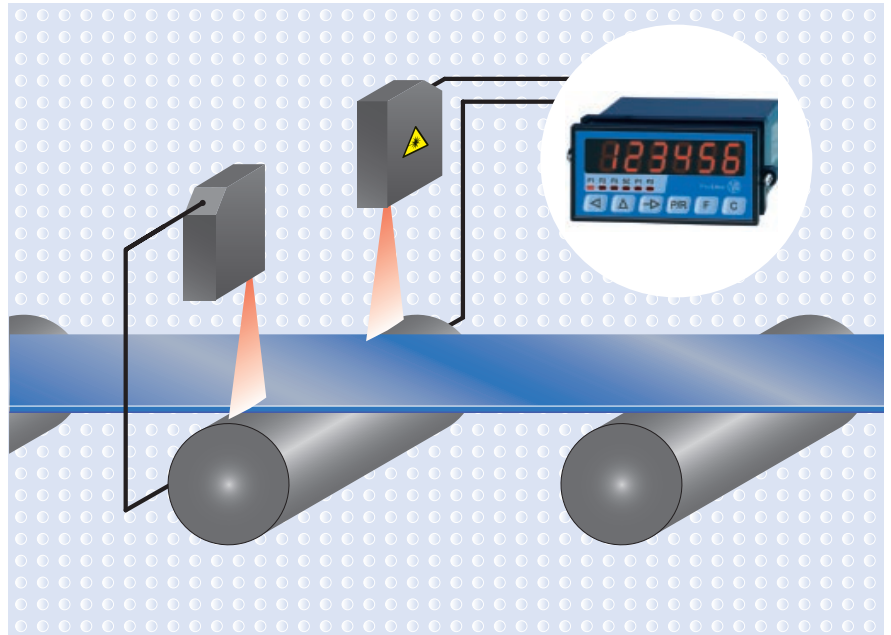
Ambient temp.	0...+60 °C
Storage temp.	-20...+70 °C
Protection	Front IP 65 to DIN 40050
Front dimension	DIN housing, 96 x 48 mm
Weight	Approx. 300 g
Display	Programmable decimal point Suppression of preceding zeros
Supply voltage	85...265 VAC (50 / 60 Hz) 18...30 VDC

Technical Data

Power consumption	12 VA, 10 W
Sensor power supply	18 VDC ± 10 %, max. 350 mA
Control input	3 inputs, PNP logic
Analog input	2 inputs 0(2)...10 V or 0(4)...20 mA
Limit P1, P2	2 floating relays, programmable as normally closed or open
Analog output	3 outputs with -10...+10 VDC / 0...+10 VDC each
Response time	0.02...5 s programmable

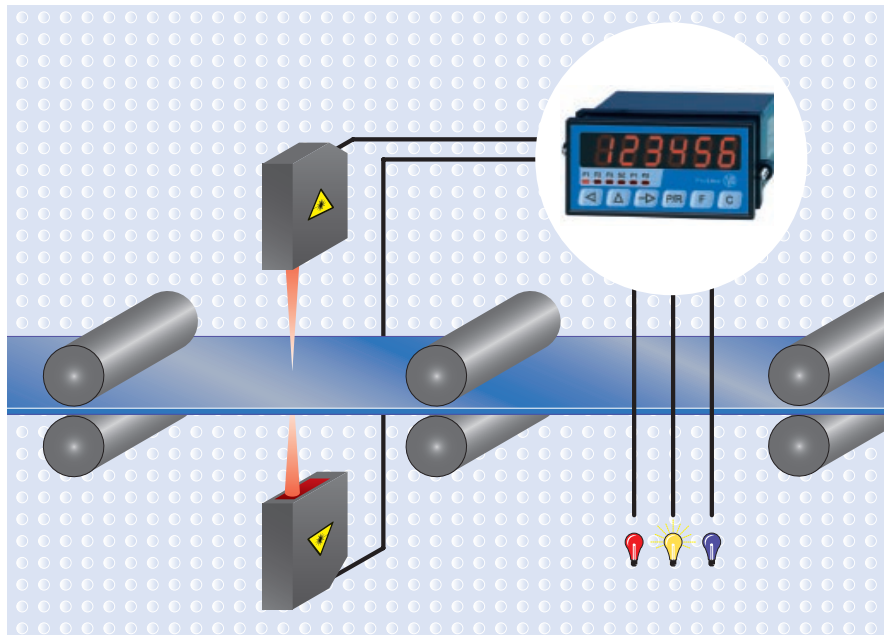
Edge Offset

Fast, exact detection of edge position is often important when machining sheet metal, films, wood or textiles. The edges can be detected quickly during the production process with two line sensors. The PCD45 detects the two measured values and calculates the offset and the material width in a 20 ms clock pulse. Two analog output signals are available for readjustment of the material guidance and a third output for controlling the film-width monitoring function or correction.



Material Thickness Measurement

The PCD45 processes both sensors simultaneously and calculates the material thickness, for example, to monitor and readjust sanding machines. The calculated, measured values are provided at two analog outputs with either -10...+10 V or 0...10 V for readjusting the two sanding belts or milling cylinders. Another control function can be linked to a third output simultaneously to display of the material thickness.



Application Features

- ▶ **Detection and display of 2 physical measured variables**
- ▶ **Connection for 2 analog sensors**
- ▶ **Programmable mathematical operations**
- ▶ **Switching outputs for max./min. monitoring**
- ▶ **3 analog outputs for process control**