DD202TA - Process displays for digital sensors

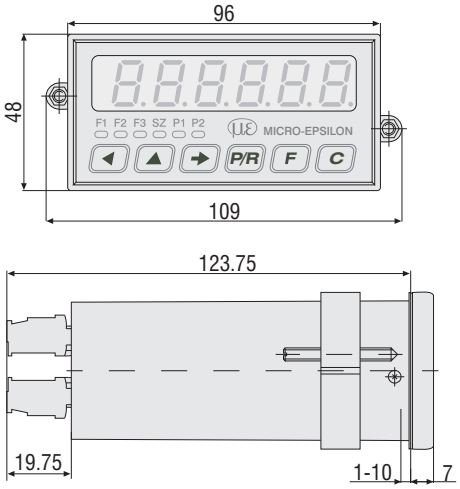
- Process display for 2 rotation speeds/velocities
- Display 6-digits
- Connection: Two one-channel digital sensors or potential-free impulses
- Two limits as optocoupler
- Peak value memory
- Input F1 with phase evaluation
- Calculating functions

Additional equipment model DD202TA(01)

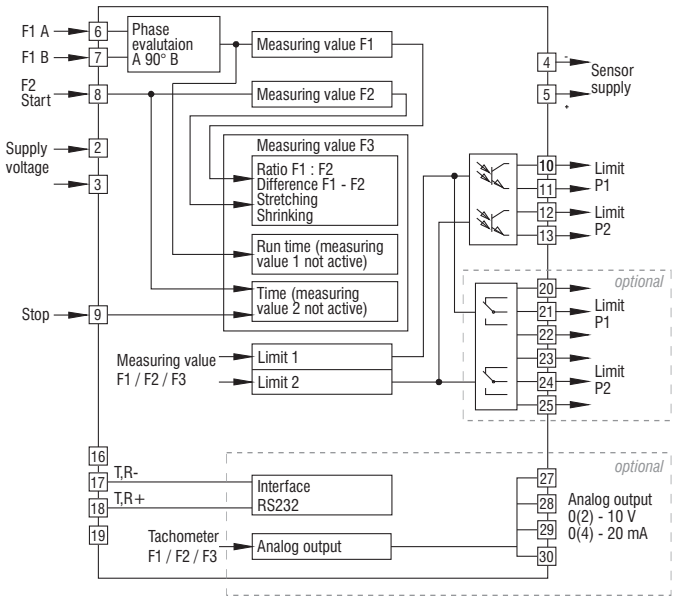
- Interface RS232
- Analogue output
- Two limits as relay outputs

The process display DD202TA evaluates two rotational / speed signals. Production can be controlled with two programmable limit switches (relay contacts). For internal evaluation of the signals, several programmed calculating functions are available: ratio, difference, stretching/shrinking, flow, time elapsed with start and stop signal, impulse rate measurement, period or impulse duration.

Dimensions (Dimensions in mm, not to scale.)



Block circuit diagram



Technical data - electrical ratings	
Power supply	24 VDC ±10 %
Power consumption	7 VA, 5 W
Sensor supply	12...26 VDC / max. 100 mA
Display	LED, 7-segment display
Number of digits	6-digits
Digit height	14 mm
Unit displayed	1/s, 1/min, 1/h programmable
Function	Tachometer, ratio display
Measuring principle	Period duration measurement
Calculating functions	Difference F1-F2; ratio F1:F2; stretching/shrinking (F2-F1):F1: flow, impulse rate measurement
Signal inputs	Comparator inputs
Input logic	NPN / PNP
Control inputs	2 inputs
Control functions	Start, stop
Counting frequency	F: 10 kHz / F2: 25 Hz, 40 kHz
Scaling factor	0.0001 ... 9999.999
Data memory	> 10 years in EEPROM
Outputs electronic	Optocoupler
Outputs relay	Potential-free change-over contact (optional)
Analogue output	optional: 2 analogue outputs 0(2)...10 V, 0(4)...20 mA; resolution 12 bit; temperature coeffic. typ. ±20 ppm/°C
Interfaces	RS232 (optional)
Standard DIN EN 61010-1	Protection class II; overvoltage category II; pollution degree 2
Emitted interference	DIN EN 61000-6-3
Interference immunity	DIN EN 61000-6-2
Programmable parameters	Assignment F1, F2 or F3; calculating functions; 2 limits; analogue output; slave pointer
Approvals	UL/cUL, CE-conform

Technical data - mechanical design	
Temperature	Operating: -10...+50 °C; storing: -20...+70 °C
Relative humidity	80 %, non-condensing
E-connection	Plug-in screw terminals
Core cross-section	1.5 mm²
Protection DIN EN 60529	IP 65 face with seal
Operation / keypad	Membrane with softkeys
Housing type	Housing for control panel installation
Dimensions	W x H x L 96 x 48 x 124 mm
Cutout dimensions	96 x 45 mm (+0.6)
Installation depth	123.75 mm
Mounting	Front panel installation by clip frame
Weight	Approx. 350 g (AC), 250 g (DC)
Material housing	Makrolon 6485 (PC)