

Process Indicator ^{with} BP-AZ 31 Profibus-Interface



Features:

Housing for door installation

*auxiliary power
90...253 V AC/DC or
20...30 V AC/DC*

6-digit numerical LED display

additional LED status display

communication via Profibus-DP

*transmission rate
9,6 kBaud...12 MBaud*

optional green display



Application:

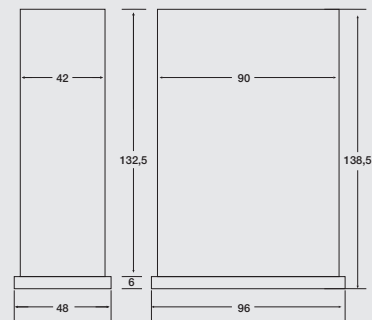
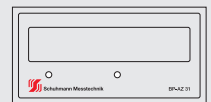
The Process Indicator is suited for the direct connection to a Profibus-DP network which can be applied in plant engineering and construction as well as mechanical engineering. With Profibus-Interface a simple and cost saving connection to a modern guidance system is possible.

Due to the flexible representation of measuring values the application range includes: power stations, engines, food industry, textile finishing, large-scale installations, plastics processing machines, steel plants and steel processing industry, water treatment, chemical industry and plant engineering.

Function:

The 6-digit Process Indicator is communicated directly by the Profibus-DP. The values to be indicated will be transmitted via BCD-code. The indicated value ranges from -999999...999999 with any decimal place.

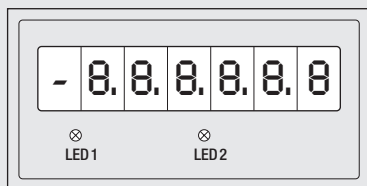
Additionally 2 red LEDs installed on front side, sign and comma position will be transmitted by a Byte. On the reverse you can find LEDs for diagnostics of Profibus-DP communication, auxiliary power and 9-pole Profibus connection.





BP-AZ 31

Sign
6th position + point 5
5th position + point 4
4th position + point 3
3rd position + point 2
2nd position + point 1
1st position



Indicating elements

Profibus-DP		
Element	LED	Indication
RUN	green	operation
BF	red	bus error
DIA	red	diagnostic error

Auxiliary power:

Low voltage: 90...253 V AC/DC
Power consumption 10...19 mA
First voltage range: 24V UC (20...30V)
Power consumption 90...180 mA

Profibus-DP module

Fieldbus:	Profibus DP
rate of transmission:	9,6 kBit/s...12 MBit/s
connection of Fieldbus:	9pol. Sub D socket
addressing:	0...99 via front side turn switch
connection:	screw- or spring tension clamps

If there is no communication to Profibus-DP master, the indication is set to „000 000“.

Examples

Port	Byte C		Byte B		Byte A	
	6. position	5. position	4. position	3. position	2. position	1. position
Bit	7 6 5 4	3 2 1 0	7 6 5 4	3 2 1 0	7 6 5 4	3 2 1 0
BCD-coding	0 1 1 1	1 0 0 1	0 0 0 0	0 0 0 1	0 0 0 0	0 0 0 0
Display	7	9	0	1	0	0
BCD-coding	1 1 1 1	1 1 1 1	0 1 1 1	0 0 0 0	0 0 0 1	0 0 0 1
Display	-	-	7	0	1	1

BCD-coding

BCD	Display
0000	0
0001	1
0010	2
0011	3
0100	4
0101	5
0110	6
0111	7
1000	8
1001	9
1010	no display
1011	no display
1100	no display
1101	no display
1110	no display
1111	no display

Reference values

Port	Byte D							
	7	6	5	4	3	2	1	0
Bit	LED 2	LED 1	sign	point 5	point 4	point 3	point 2	point 1

Mounting details:

Housing for door installation

Type of protection: IP 54 front/IP 10 plug clamps
Front frame: 96 x 48 mm
Depth: 138,5 mm
Housing material: PC / ABS self-extinguishing according to UL94V-0
Electrical connections via removable screw terminal strips
Weight: 290 g

Environmental conditions:

Storage temperature: -40...+70 °C
Operating temperature: 0...55 °C
Isolation voltage: ≤ 4kV auxiliary voltage AC/DC
500V Bus

Electromagnetic compatibility law

Germany in accordance with
EMC Directive: 2004/18/EG*
Low-Voltage Directive: 2006/95/EG

Ordering information:

Type: BP-AZ 31
Auxiliary power: in clear text (e.g. 230V AC)

* minimum deviations possible during HF-radiation influence