



Sensors for motion control

# Multifunctional analogue display



Systems for the evaluation of standard signals



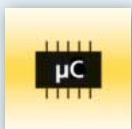
Clearly legible display

Touch display and clear text for intuitive handling

Change of display to red/yellow/green when set limit is exceeded or not reached

16-bit resolution

Additional functions such as tare, filter, averaging, signal combination



## Analogue display 4.0


The new multifunctional display is more than just a display: It pre-processes digital signals in a decentralised manner and, if necessary, passes this information on to a higher-level controller. This intelligent feature makes it ideally suited for Industry 4.0 applications.

## Versatile analogue value display

The intelligent display visualises different process parameters of sensors with an analogue output or of transmitters with a standard signal output. The freely adjustable scaling factors make it possible to convert and indicate the input signals as physical values (e.g. pressure, temperature or volumetric flow quantity).

If you use a pressure transmitter, for example, the volume of a tank can be displayed. It is also possible to offset input signals against each other, e.g. for differential pressure measurement.



| Type  | Operating voltage [V] | Inputs analogue | Inputs programmable | Outputs transistor | Order no.     |
|---|-----------------------|-----------------|---------------------|--------------------|---------------|
| <b>Multifunction display · touch display and clear text</b>                       |                       |                 |                     |                    |               |
|  | 115 / 230 AC<br>24 DC | 2               | 3                   | –                  | <b>DX2041</b> |
|   | 115 / 230 AC<br>24 DC | 2               | 3                   | 4                  | <b>DX2042</b> |
|   | 24 DC                 | 2               | 3                   | –                  | <b>DX2051</b> |
|   | 24 DC                 | 2               | 3                   | 4                  | <b>DX2052</b> |

### User-friendly handling

All settings can be made via a modern, resistive touch-screen interface. The display automatically changes from display mode to parameter setting mode.

All parameters are displayed in clear text on the screen, enabling an easy and intuitive use.

A password mechanism provides protection against manipulation.

### Monitoring of limit values

The user can define up to four limit values. Up to four transistor outputs switch if a set limit is not reached or exceeded.

The states of the outputs are displayed and the colour of the display can be shown in red, yellow or green depending on the process value.

### The basic functions:

- Single mode: one-channel operation (only input A)
- Dual mode: two-channel operation (input A and B separately)
- A a B: summation mode (input A + input B)
- A – B: differential mode (input A - input B)
- A d B: dividing mode (relation A : B)
- A m B: multiplication mode (product A x B)

### Common technical data

|                                  |                                  |  |
|----------------------------------|----------------------------------|--|
| Operating voltage                | [V DC]<br>[V AC]                 | 18...30<br>115 / 230   |
| Current consumption (DC)         |                                  | approx. 100 mA (without load)  |
| Sensor supply (DC)               | [V DC]<br>Output current         | $U_B - 1\text{ V}$<br>max. 250 mA  |
| Current consumption (AC)         |                                  | approx. 3 VA (without load)  |
| Sensor supply (AC)               | [V DC]<br>Output current         | approx. 24 V DC ( $\pm 15\%$ )<br>150 mA to 45 °C,<br>80 mA from 45 °C                       |
| Analogue inputs                  |                                  | -10...+10 V,<br>0...20 mA / 4...20 mA  |
| Control inputs                   | Format<br>Frequency              | HTL, PNP (10...30 V)<br>max. 10 kHz  |
| Control outputs (DX2042, DX2052) | Format / level<br>Output current | 5...30 V (depending on the voltage on Com+), PNP<br>max. 200 mA (max. 150 mA at Com+ < 10 V) |
| Display                          | Type<br>Colour<br>Handling       | LCD (backlight)<br>red/yellow/green (selectable)<br>Touch screen (resistive)                 |
| Ambient temperature              | [°C]                             | -20...45/60  |
| Dimensions (W x H x D)           | [mm]                             | 112 x 48 x 116   |

### Dimensions

