

## The immediate lead-in to the world of professional measuring technology

The integrated system of measuring instrument, sensors and accessories allows plug-and-play without any problems: connect – switch on – measure.

Stored measuring data can be transferred to a PC via USB, and the evaluation is done by an adapted version of the software HYDROcom.



- Two analog inputs for 0–20 mA or 4–20 mA
- 12-bit analog/digital converter
- Automatic calculation of the difference of both measuring channels
- LCD display with switchable backlight
- 128 kB of measuring value memory
- Scan rate 1 ms
- USB data transmission
- ISDS (Intelligent Sensor Detection System)
- Zero point equalisation

### Technical data

|                                 |                                   |
|---------------------------------|-----------------------------------|
| Measuring inputs                | 2x analog, 0(4) ... 20 mA         |
| Measuring rate                  | 1 ms                              |
| Resolution A/D-converter        | 12 bit                            |
| Error limit                     | ± 0.2 % of end value              |
| Measuring value memory          | 128 kBit, 60,000 measuring values |
| Display                         | LCD display with backlight        |
| Interface                       | USB                               |
| Power supply                    | NiMH batteries, 2.4 V, 2,000 mAh  |
| Battery operation time          | est. 6 h                          |
| Protection type                 | IP 40                             |
| Operation / storage temperature | 0 ... 60 °C / -20 ... +70 °C      |
| Relative humidity               | < 80%, not condensing             |
| Dimensions (L x W x D)          | 185 x 90 x 46 mm                  |
| Weight                          | est. 0.3 kg                       |
| CE labelling                    | EN 50081-1 and EN 50082-1         |
| Conformity                      | RoHS                              |

### Delivery as set in measuring case:

- MultiHandy 2020
- Mains power adaptor
- Case
- 2 pressure sensors
- 2 MINIMESS® direct connectors
- HYDROcom Basic as download

### Standard measuring cases



### Individual measuring cases



Exemplary image



### Bonus

Visit us at „www.hydrotechnik.com“ and download the software HYDROcom Basic free of charge.

The use it for the transfer of measuring data to a PC and the comfortable evaluation and presentation.

### Loading valve 31GB



The loading valve 31GB is equipped with a f/l-converter and especially designed for the use with the MultiHandy 2020. By the simulation of load states and the simultaneous measuring of pressure and volume flow rate, service technicians receive valuable information with low measuring effort. A suited case is available as an option.

### Information

You can also connect pressure sensors to the MultiHandy 2020 that are not equipped with the automatic sensor detection ISDS. They must have an output signal of 0-20 mA and correspond with one of the measuring ranges 6, 60, 100, 200, 400 or 600 bar.

### Part numbers for measuring sets

| Standard measuring sets: MultiHandy 2020 with ...   | TKZ                  |
|---|----------------------|
| 2 pressure sensors 0 to 200 bar   | 3160-10-10-69.00     |
| 2 pressure sensors 0 to 400 bar   | 3160-15-15-69.00     |
| 2 pressure sensors 0 to 400 bar and 0 to 600 bar  | 3160-15-18-69.00     |
| 2 pressure sensors 0 to 600 bar   | 3160-18-18-69.00     |
| 2 pressure sensors 0 to 60 bar and 0 to 200 bar   | 3160-21-10-69.00     |
| 2 pressure sensors 0 to 60 bar and 0 to 400 bar   | 3160-21-15-69.00     |
| 2 pressure sensors 0 to 60 bar and 0 to 600 bar   | 3160-21-18-69.00     |
| 2 pressure sensors 0 to 60 bar  | 3160-21-21-69.00     |
| 2 pressure sensors -1 to 6 bar and 0 to 400 bar   | 3160-32-15-69.00     |
| 2 pressure sensors -1 to 6 bar and 0 to 600 bar   | 3160-32-18-69.00     |
| 2 pressure sensors -1 to 6 bar and 0 to 60 bar  | 3160-32-21-69.00     |
| Individual measuring sets: MultiHandy 2020 with ...   | TKZ                  |
| 2 pressure sensors  | 2020p/p-xx-xx        |
| 2 pressure sensors and 1 flow meter   | 2020p/p/Q-xx-xx-yy   |
| 2 pressure sensors, 1 flow meter, 1 temperature sensor  | 2020p/p/T/Q-xx-xx-yy |
| Replace „xx“ by the code of the desired pressure sensor and „yy“ by the code of the desired flow meter. |                      |

### Codes of the sensors for individual measuring cases

| Measurand        | Measuring range | TKZ              | Code |
|------------------|-----------------|------------------|------|
| Pressure         | -1 to 6 bar     | 3403-32-S-N4.37  | 32   |
|                  | 0 to 60 bar     | 3403-21-S-N4.37  | 21   |
|                  | 0 to 200 bar    | 3403-10-S-N4.37  | 10   |
|                  | 0 to 400 bar    | 3403-15-S-N4.37  | 15   |
|                  | 0 to 600 bar    | 3403-18-S-N4.37  | 18   |
| Volume flow rate | 1 to 10 l/min   | 31G7-01-S-35.030 | 01   |
|                  | 2 to 75 l/min   | 31G7-70-S-35.030 | 70   |
|                  | 9 to 300 l/min  | 31G7-71-S-35.030 | 71   |
|                  | 16 to 600 l/min | 31G7-72-S-35.030 | 72   |

### Accessories

| Product                          | Qualities          | TKZ              |
|----------------------------------|--------------------|------------------|
| USB cable for data transmission  | Length 2 m         | 8824-F4-02.00    |
| Car adaptor                      | 12/24 VDC – 6 VDC  | 8812-09-04.00    |
| Temperature sensor               | -50 to +200 °C     | 3973-04-S-01.00  |
| Surface temperature sensor       | -50 to +200 °C     | 3170-01-S-03.00  |
|                                  | -50 to +400 °C     | 3170-01-S-07.00  |
| Immersion temperature sensor     | -50 to +200 °C     | 3170-02-S-06.00  |
|                                  | -50 to +400 °C     | 3170-02-S-08.00  |
| Loading valve with f/l-converter | 300 l/min, 350 bar | 31GB-71-S-35.030 |
| Case for loading valve           | black              | 3160-00-62.07    |
| Upgrade to HYDROcom full version |                    | 8874-16-00.01    |