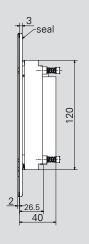


4x**ø**4.5



| Inputs (adjustable)              | up to 4 analogue inputs (420 mA, galvanically separated, Ra=4001750 $\Omega$ ), without transmitter feed           |  |
|----------------------------------|--|--|
| Scaling (adjustable)             | deactivated, linear or polygonal (max. 20 points)  |  |
| Filter                           | deactivated or with dampening/<br>filter coefficient   |  |
| Touch-display                    | TFT, coloured, 3.5", 320×240 px  |  |
| Available views (adjustable)     | values, bar graph, curve chart,<br>vector diagram  |  |
| View change                      | manually or automatically  |  |
| Time axis curve chart            | 19s/48s/95s/3min/6min/<br>12min/30min/1h/2h/4h/<br>8h/16h/24h/3d/7d  |  |
| Alarm configuration (adjustable) | LoLo Lo Hi HiHi for all channels thresholds: constant, lower threshold, upper threshold, hysteresis timing:        |  |
|                                  | delay ON/OFF,<br>retention time ON/OFF<br>acoustic collective alarm<br>freely parameterisable                      |  |
| Alarm display (adjustable)       | deactivated, permanent, flashing<br>(period, retention time, alarm source,<br>texts/colours adjustable)            |  |
| Languages (menu)                 | English, French, German,<br>Italian, Spanish   |  |
| Date and time                    | time zone and summer time can be set   |  |
| Brightness                       | 20406080100%   |  |
| Screen saver                     | deactivated or after 151030 min  |  |
| Access protection                | password 6-digit (GAMP 5)  |  |
| Current consumption              | 500 mA   |  |
| Baud rate                        | 1 200 bit/s to 115 200 bit/s   |  |
| Connections                      | 1x USB-host on the rear for transfer of configuration files, screw terminals for 4 analogue inputs, bus and supply |  |
| Power supply                     | 24 VDC ± 5 %   |  |
| Housing                          | wall recessing   |  |
| Ambient temperature              | 050°C  |  |
| Storage temperature              | -1070°C  |  |
| Humidity                         | 590% without condensation  |  |
| Protection class PUC 44-1        | IP20   |  |
| Protection class PUC 44-2/-3     | IP65 (front side),<br>IP20 (housing and terminals)   |  |

| Housing type                         | Α |
|--------------------------------------|---|
| Aluminium anodised                   | 1 |
| Stainless steel<br>standard          | 2 |
| Stainless steel with magnetic holder | 3 |

| interface    | В  |
|--------------|----|
| Modbus RTU   | MB |
| BACnet MS/TP | BN |
|              |    |

| Parameterisation     | С |
|----------------------|---|
| Provided by customer | 0 |
| Factory-provided 1)  | 1 |

1) according to specified parameter list

| Order code | Α | В | С |
|------------|---|---|---|
| PUC44 -    | - | - |   |

## PANLES FOR DISPLAYING, ALERTING, NETWORKING

Many companies (e.g. in the life sciences sector) are required to use monitoring systems in their critical production processes. These systems have to operate with a high degree of data security and record, transfer and save quality-relevant measurement data. Professional suppliers of monitoring systems and validation services offer solutions which are aligned with GAMP 5 for this task. GAMP stands for *Good Automated Manufacturing Practice*. It is a quasi-standard that sets out the requirements for computer-aided systems in a regulated pharmaceutics environment.

One important task of monitoring processes is to make measurement data available in the locations where local decisions depend on them. halstrup-walcher display panels are the optimum solution for this task:

| Product                           | PUC 44  | PUC 24  | PUC 28 (K)   |  |
|-----------------------------------|---|---|--|--|
| Details on                        | p.24 + p. 25  | p.14  | p. 15  |  |
|                                   | 12.5 (d. 1.3.3 miles)<br>12.3 (miles)<br>13.3 miles)<br>12.3 polishop<br>walkford   |   |  |  |
| Special features                  | Multi-channel process display with<br>touch screen<br>- Values, curves, bar graph, vector<br>can be displayed<br>- 4 alarms per channel<br>- Modbus/BACnet connection | Cleanroom panel with integrated<br>differential pressure sensor for<br>climate data display, temperature/<br>humidity measuring transmitter<br>can be connected | Process panel with integrated differential pressure sensor for climate data display, temperature/humidity measuring transmitter can be connected |  |
| Application                       | Process monitoring for cleanrooms and control cabinets (machines, plants)   | Process monitoring for cleanrooms (Pa, °C, % rF)  | Process monitoring panel (optional: with calibration connection) (Pa, °C, % rF)  |  |
| Measurement<br>Range              | Up to 4 external analogue values of any phys./chem. values  | ± 100 or ± 250 Pa, freely scalable within this range,<br>% rF/°C: Depending on the connected measuring transmitter  |  |  |
| Degree of measurement uncertainty | Depending on the connected measuring transmitters   | Differential pressure on board: 0.5 % of max. value (standard) (0.3 Pa margin of error for the reference)   |  |  |
| Display                           | Touch-display (TFT), coloured, 3,5", 320×240 pixels   | LED-display, 3 lines  |  |  |
| Alerting                          | Visually/acoustically, cf. p. 24  | Relay outputs, acoustic alarm   |  |  |
| Networking                        | Modbus RTU, BACnet MS/TP  | RS 232, PROFIBUS DP (both optional)   |  |  |

## **ACCESSORIES**

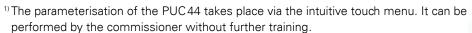
## Accessories for PUC24 and PUC28(K) on p. 11.

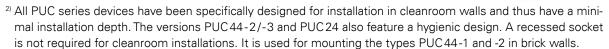
**Parameterisation PUC 44** <sup>1)</sup> **Order-No.**On-site parameterisation (PUC 44) in the order key according to customer specifications cf. p. 25

## Installation PUC 44<sup>2)</sup>

Flush-mounted box 9601.0188

for masonry wall installations 3)





<sup>&</sup>lt;sup>3)</sup> Recessed area for plastering the flush-mounted box into the wall: 160 mm x 160 mm, 75 mm (width x height, depth)

