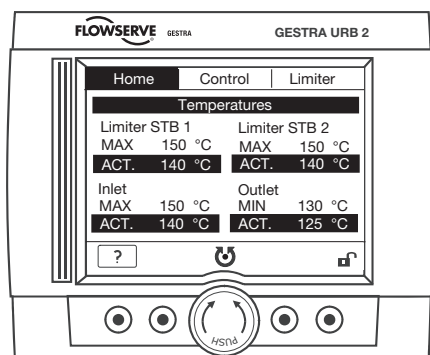


URB 2  
Home screen (steam boiler)



URB 2  
Home screen (hot-water boiler)

## Operating & Display Unit **URB 2**

### System description

The URB 2 is an operating & display unit for all GESTRA CAN bus devices that uses the CANopen protocol to register all the data telegrams coming from the sensors, control units and actuators that are provided by the CAN bus.

The following readings, parameters and settings can be displayed and – with the exception of the actual values – also be changed by means of the URB 2.

Display – Start window	Level	Conductivity	Blowdown	Temperature
Actual value bar chart	●*			
Actual value, numerical	●	●*		●
Manual / Automatic operation	●	●		
<b>Further indications</b>				
MIN limit	●	●		●
MAX limit	●	●		●
Switchpoints, on / off	●	●		●
(De)-energizing times of relays	●	●		
Measuring range	●	●		
Setpoint, continuous	●	●		
Control parameter	●	●		
Valve position	●	●		
LW test	●			
Unit [µS/cm or ppm]		●		
Temperature compensation		●		
Stand-by		●		
Purging pulse 24h		●		
Intermittent blowdown interval			●	
Duration of intermittent blowdown			●	
Blowdown pulse			●	
Pulse interval			●	

\* 2<sup>nd</sup> water level indicator acc. to TRD 401, EN 12952/...53

\*\* Temperature-compensated indication acc. to VdTÜV-Bulletin WÜ 100

### Function

The operating & display unit URB 2 evaluates at regular intervals the data telegrams of all sensors, controllers and actuators in a CAN bus system. The readings, parameters, settings and messages are indicated in plain text. When used as second water level indicator in boiler plants (TRD 401, EN 12952 / ...53), the level is also indicated in the form of a bar graph.

Several languages can be selected for plain text display. The password protection prevents unauthorized persons from changing parameters and settings.

If you quit the start window, where parameters and settings are indicated and can be changed, the operating & display unit URB 2 returns to the start window after 5 minutes if no input is made.

The help function in the various operating levels offers additional information on how to operate the equipment.

The control knob with the integrated pushbutton allows the quick and easy navigation in all system levels as well as setting the parameters of the individual devices.

### The equipment also features the following functions:

- Password protection
- Software updating (Flash)
- Reading the software versions of the CAN bus devices
- Display error messages

### CAN bus

All controllers and associated equipment (for level, temperature and conductivity monitoring) are interconnected by means of a CAN bus using the CANopen protocol to DIN ISO 11898. Every item of equipment features an electronic address (node ID). The four-core bus cable serves as power supply and data highway for high-speed data exchange. The operating & display unit URB 2 is pre-configured at our works and ready for operation with other GESTRA devices.

### Design

Case for panel mounting in control cabinets.  
The connectors are accessible at the rear of the unit.  
Cut-out dimensions: 174 x 145 mm.

Operating & Display Unit  
**URB 2**

**Technical Data**

**Input / output**  
CAN bus interface with power supply 18-36 V DC,  
short circuit protected

**Data exchange**  
CAN bus to ISO 11898, CANopen protocol

**Indicators and adjustors**  
1 Graphic display, resolution 320 x 240 pixels,  
illuminated  
4 Pushbuttons  
1 Control knob with integrated pushbutton  
(navigation wheel)

**Wiring**  
2 Connecting plugs M 12, with 5 poles

**Power consumption**  
5.2 VA

**Protection**  
Front face: IP 54 to EN 60529  
Rear panel: IP 10 to EN 60529

**Admissible ambient temperature**  
0 – 55 °C

**Case materials**  
Front face: Ultramid A3K  
Casing: Enclosure: Sheet metal type DC01-A,  
surface yellow chromatised

**Weight**  
approx. 1.1 kg

**ATEX (Atmosphère Explosible)**

According to the European Directive 94/9/EC the equipment  
must **not** be used in explosion risk areas.

**Important Notes**

Note that screened multi-core twisted-pair control  
cable **is required** as BUS line , e.g. UNITRONIC® BUS CAN  
2 x 2 x ... mm<sup>2</sup> or RE-2YCYV-fl 2 x 2 x ... mm<sup>2</sup> or the control  
cable assembly available as add-on equipment.

The cable length dictates the baud rate (data transfer rate)  
between the bus nodes, and the total power consumption of  
the sensor dictates the conductor size.

Cable length	Number of pairs and conductor size [mm <sup>2</sup> ]
125 m	2 x 2 x 0.34
250 m	2 x 2 x 0.5
335 m	2 x 2 x 0.75

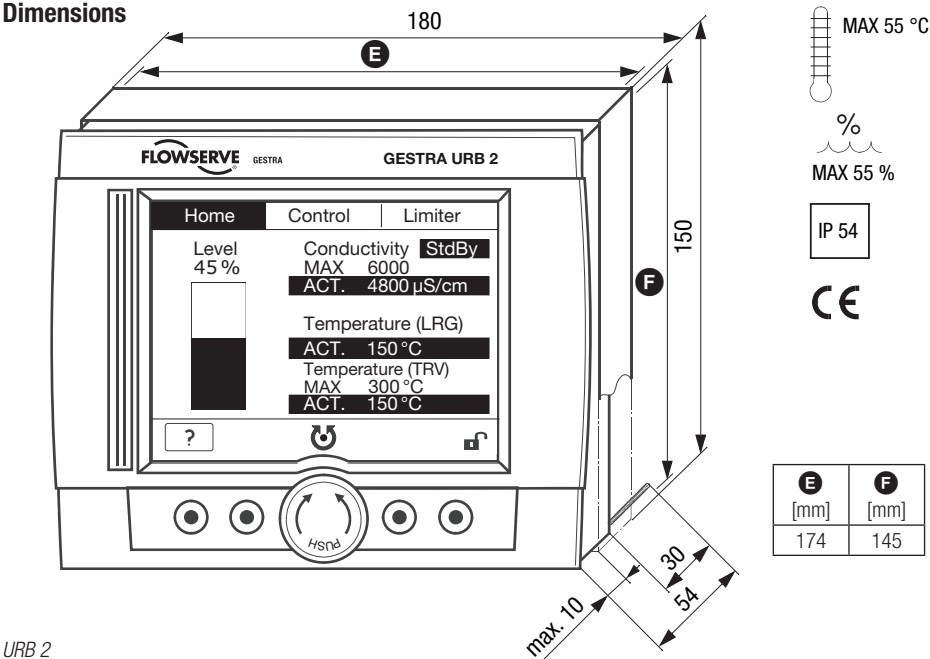
For more information on cable lengths see installation in-  
structions.

**Order & Enquiry Specification**

GESTRA Operating & display unit URB 2.

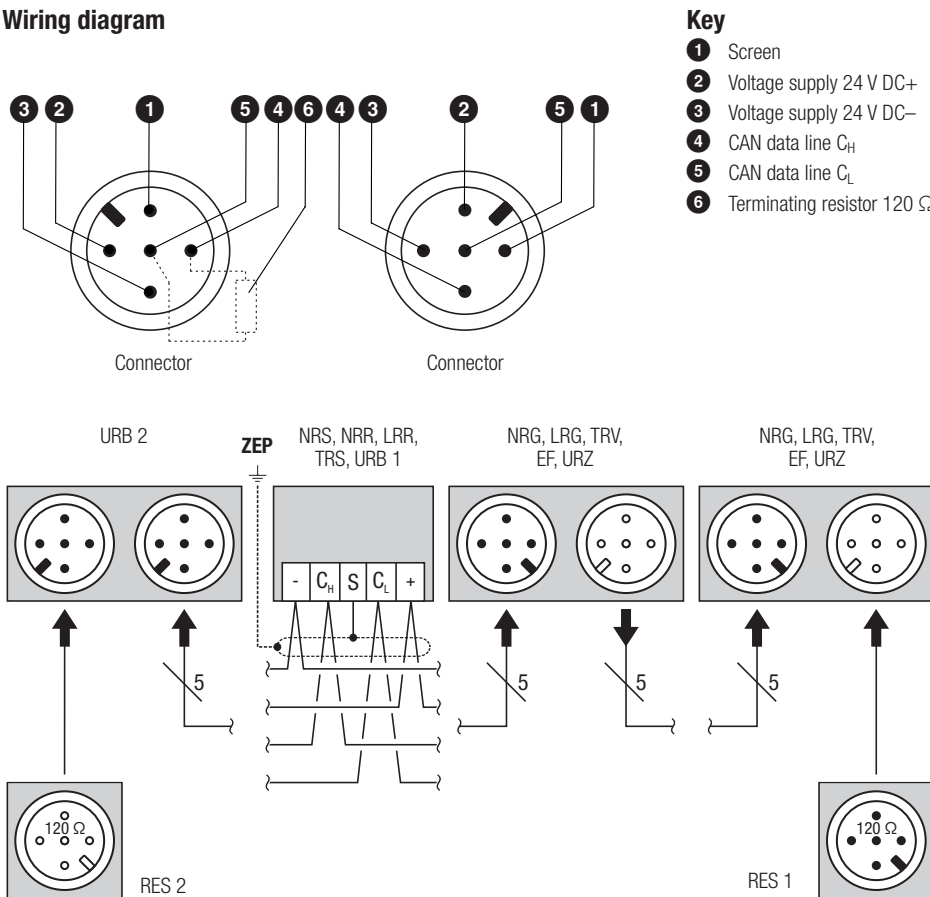
Supply in accordance with our  
general terms of business.

**Dimensions**



URB 2

**Wiring diagram**



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