

Description of Tank Content Measurement and Display System

The decentralized alarm system monitors filling level of tanks by means of connected sensors and releases level alarms at exceeding or undergoing of configured limits. The whole system behavior (measuring ranges, gravity of medium, limits, delay times, alarm classes, display texts etc.) can be adjusted by a PC-based configuration software factory-provided or by customer. Therefore, only a PC/laptop with CAN-adapter is required.

The filling level is converted by the tank level sensors into a proportional current signal and acquired and processed by corresponding data station. The tank data are transmitted via CAN bus to the display unit for presentation.

Tank Level Sensors

Pressure transmitters of series AHD-S 201 are used as tank level sensors with proportional 4-20 mA output signal for measuring ranges 0-100 mbar, 0-160 mbar or 0-200 mbar corresponding to filling levels of 1.0 m resp. 1.6 m or 2.0 m for water tanks, as well as 1.2 m resp. 1.92 m or 2.4 m for Diesel oil tanks.

Data Station

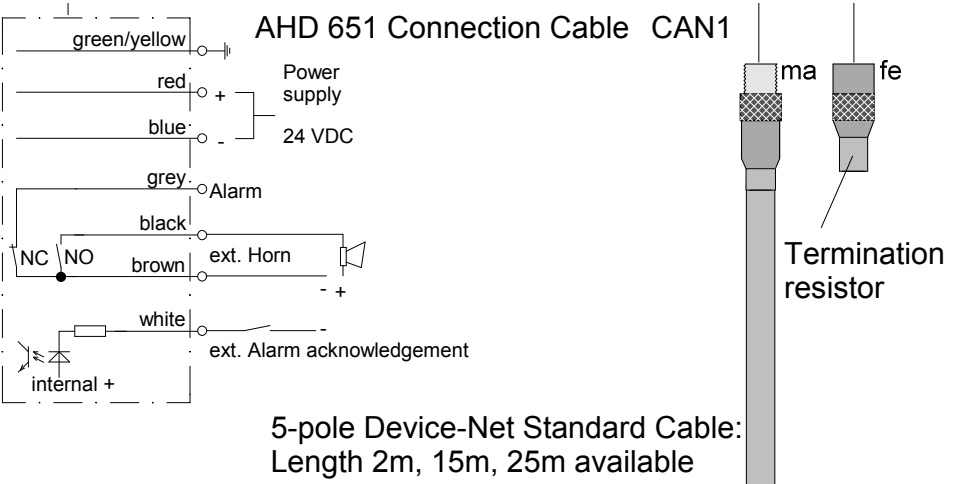
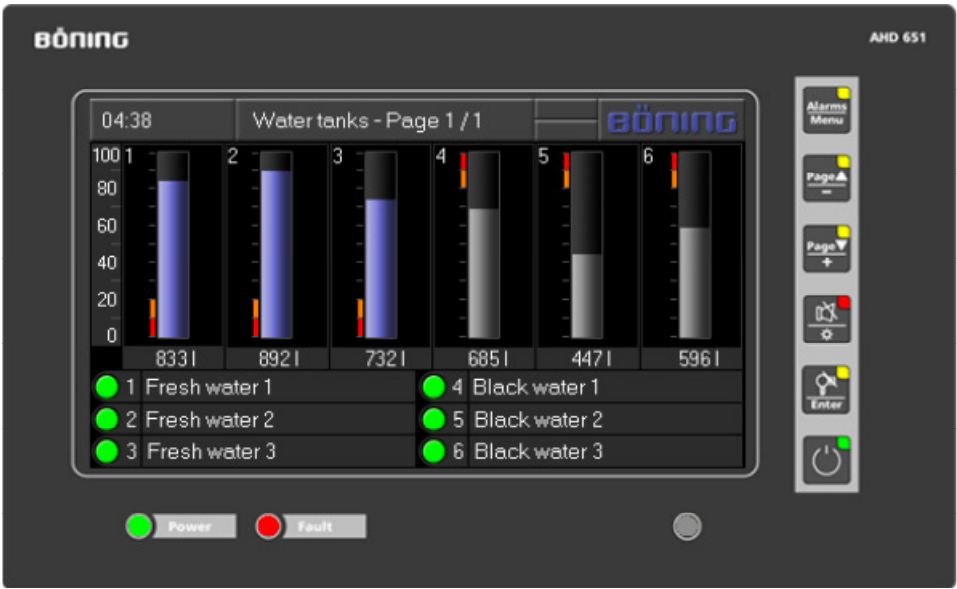
The data station AHD-SAS 15 with CAN bus connection consists of 15 inputs for analog und binary sensors, which can be individually provided with pluggable analog modules for measurement of different input signal types (current, voltage, resistance, NiCrNi-thermo couples, contacts etc.).

All inputs can be monitored for sensor faults. The sensor connection as well as the extension of system by binary data stations is performed with pluggable cage-clamp terminal lists.

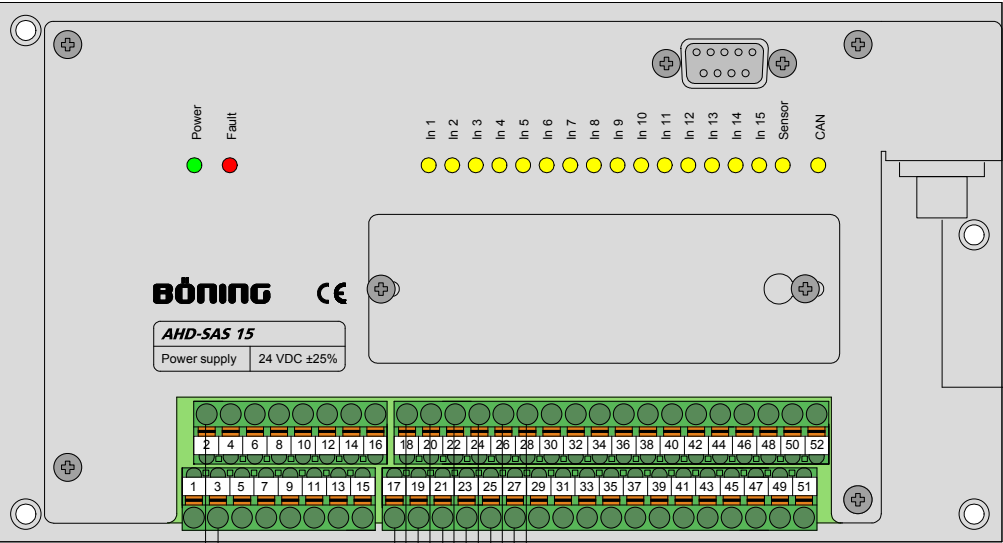
Display

The tank data are transmitted from data station to colour display AHD 651 by means of a CAN bus system. The colour display presents all system information in tabular or graphical form.

A separate alarm table is provided for indication of current alarm situation. The table is automatically displayed at occurrence of new alarms. The device is provided with internal alarm buzzer, acknowledgement push button as well as contact outputs for control of an external horn and common alarm message. The dimming of display backlight is performed automatically in dependence of ambient brightness.

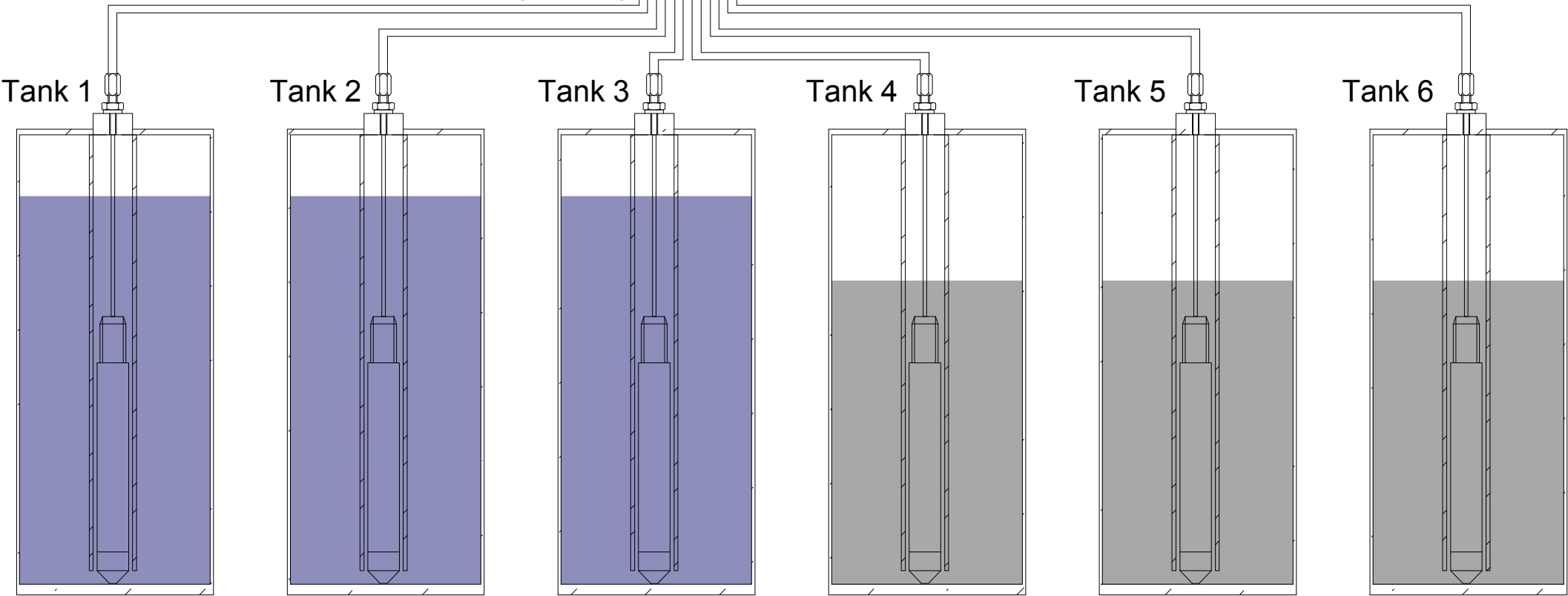


Data Station AHD-SAS 15



15 analog sensor inputs

i.e. Pressure transmitters AHD-S 201 (4-20mA)



Power supply 24VDC (+30%/-25%)

	Beschreibung / Description		Geändert/Modified	Datum/Date
	Tank Content Measurement and Display System		Dieckmann	10.05.2010
			Geprüft/Checked	Datum/Date
	Dateiname / Filename		Lg.Nr./Art.no.	Seite/Page
Böning Automationstechnologie GmbH & Co. KG Am Steenöver 4 D-27777 Ganderkesee Tel: +49(0)4221 9475-0 Fax: +49(0)4221 9475-22 info@boening.com www.boening.com		0001_Schema_web_EN_20100510.tcw		