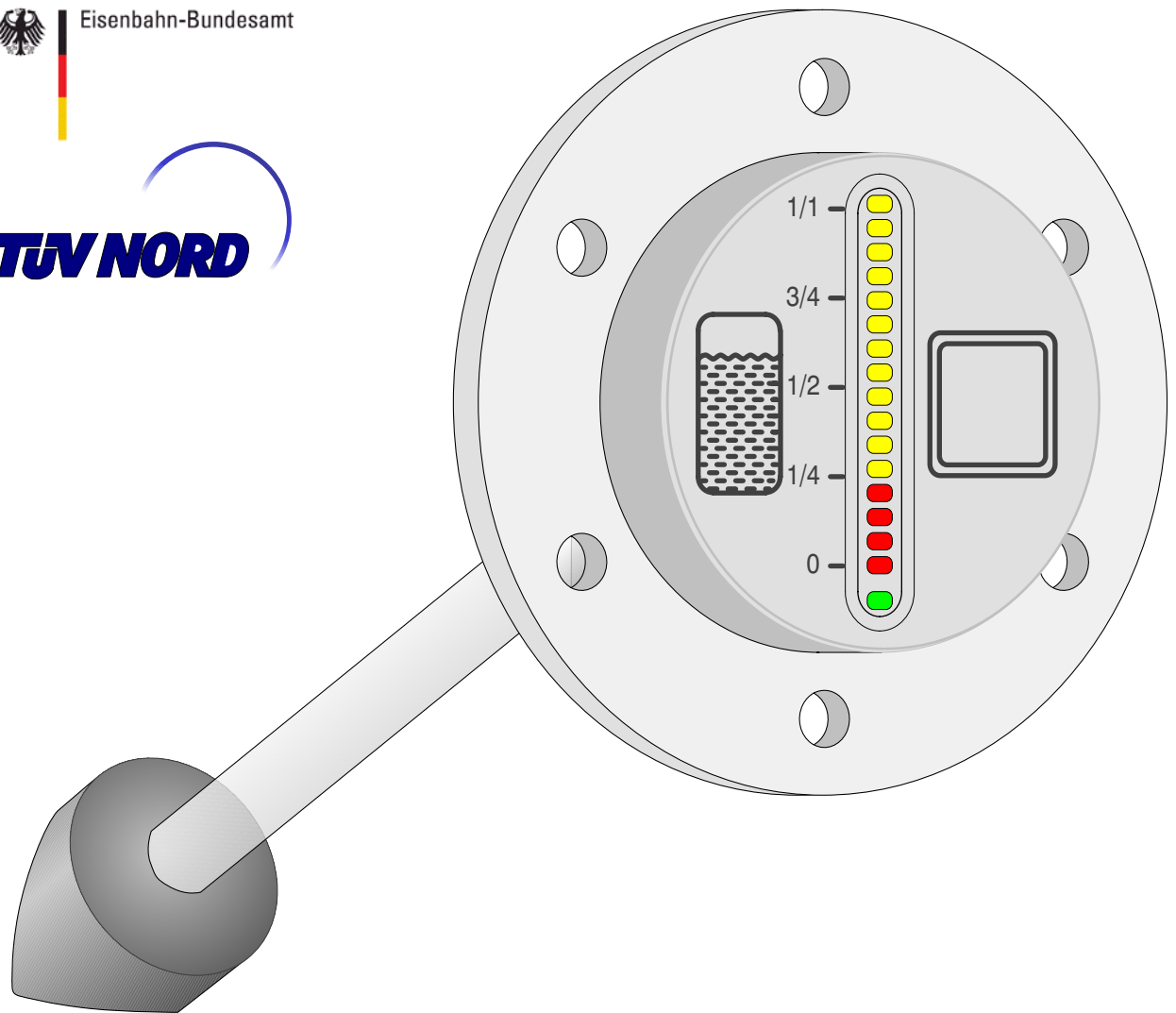


Filling Level Sensor for lateral mounting

with level limit switch as overflow protector



MWAT 5

KROMA
FÜLLSTANDSMESSTECHNIK GmbH
Rostocker Straße 9-10 D-39124 Magdeburg
Telefon: +49(0)391/2538744 Fax: +49(0)391/2538745
E-Mail: info@KROMA.eu Internet: www.KROMA.eu

MWAT 5 Filling Level Sensor

with level limit switch as overflow protector

Description

KROMA MWAT 5 filling level sensors are designed to continuously measure liquid levels of fuel tanks, while also having an overflow signalling feature. The MWAT 5 is suited for lateral mounting in the tank. Different types of flanges are available to adapt the MWAT 5 optimally to the tank. Liquid level measurement is accomplished through a float which is fixed on a lever arm. The angle of the lever arm is measured by a magnetic sensor and transformed to an electrical voltage signal proportional to the filling level. Irrespective of the measuring signal, the overflow switch with thermistor (limit value monitor) will be actuated when the maximum level is reached. Then, the switch will break the overflow protector circuit of the connected fuelling facility.

The length of the lever arm which can be adapted to the particular tank by the MWAT 5 manufacturer is dependent on the filling level and the configuration of the tank. On model MWAT 5_1_ , the rotation axis of the lever arm is parallel to the seat face of the MWAT 5 flange („longitudinally“), whereas on models MWAT 5_2_ and MWAT 5_3_ , the rotation axis is perpendicular to it („transversely“).

The MWAT 5 level sensor can be furnished with a direct LED display. One of KROMA's proven level indicators with piezoelectric pushbutton is accommodated in the cover of the flange. After actuation of the piezoelectric pushbutton, the filling level can be read directly on the MWAT 5 level sensor. By pressing the pushbutton, the display can be switched on and off. In the standard configuration, the display automatically switches off after 15 seconds. A longer on-time (up to 960 seconds or infinite) can be programmed by the manufacturer (refer to KROMA BAZ 13).

Regardless of whether a direct display feature is provided, the instrument permits connection of additional KROMA level indicators, adjustable electronic limit switches or measuring transformers (e. g. for connection of board computers).

Special Features

- High accuracy through stepless magnetic transfer (no electrical or mechanical ducts)
- Reading of the liquid level via direct LED display on the filling level sensor and/or via remote display
- Integral level limit switch as overflow protector (limit value monitor for filling stations of German Railways or road tank cars)
- Lateral mounting in the tank side with transversely or longitudinally arranged lever arm
- Made of stainless steel
- NBR foam float for fuels
- Rugged design tested according to EN50155 for use on rail vehicles
- Protected as utility model
- Type approval as overflow protector for construction rail vehicles (certificate no. EBA 32AZ3/0163/06)

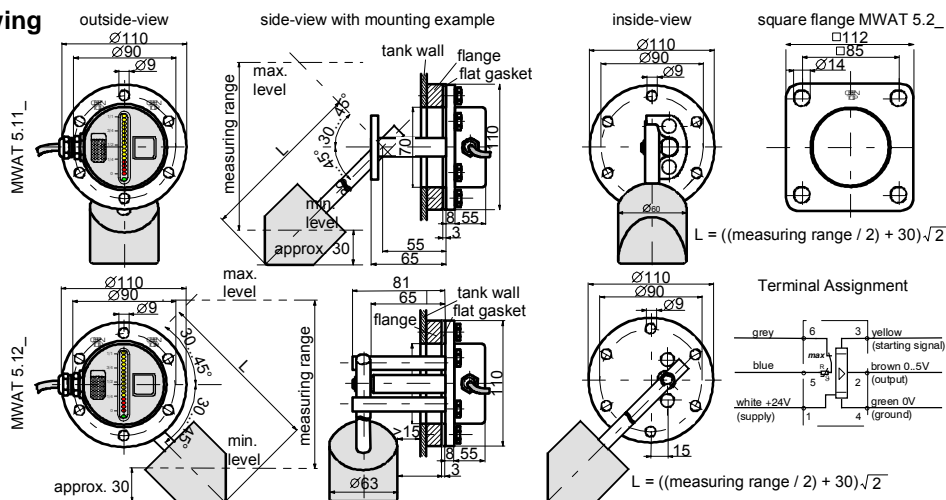
Technical Data

Operating voltage:	Nominal voltage 24 V DC (tolerance 16V to 60V DC)
Operating current:	10 mA (without display), max. 150 mA (with display)
Static current:	< 0.05 mA
Limit value monitor circuit:	max. 18 V; 0.100 A; R ₂₅ = 115 to 220 Ω
Electrical connection	Integral traction cable, customized cable length
Measuring range:	min. 300 mm, max. 1,200 mm
Storage temperature range:	-55°C to +70°C
Liquid temperature range:	-40°C to +70°C
Liquid density:	>= 800 kg/m ³
Operating pressure:	<= 2 bar
Vibratory strength:	7.9 m/s ² (5 – 150 Hz)
Shock resistance:	50 m/s ²
Degree of protection:	IP 65
Weight:	Approx. 1.0 kg
Connection:	Refer to outline drawings.

Information required with order

KROMA MWAT 5 filling level sensor with level limit switch MWAT 5 . 1 1 1 – 500 - K1,0
 Connecting elements: "1" = round flange Ø110mm, "2" = square flange 112x112mm
 Lever arm: "1" = „longit.“, "2" = „transv. right“, "3" = „transv. left“ with NBR float
 Direct display: "0" = without display, "1" = with LED display
 Measuring range: level to be measured in mm, e. g. "500"
 Electrical connection: "K" = integral cable, "S" = plug, "l" = left, "r" = right, "1,0" = cable length 1.0 m

Outline Drawing



Subject to technical modifications.