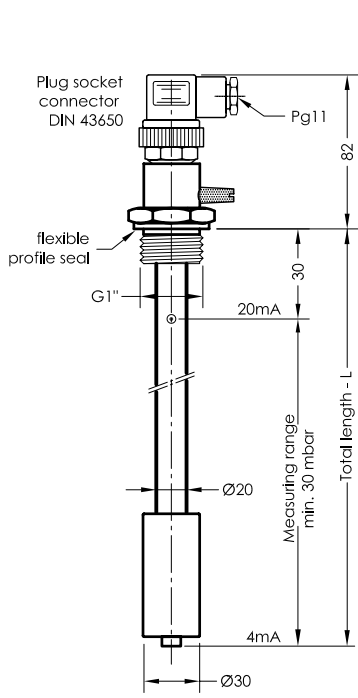


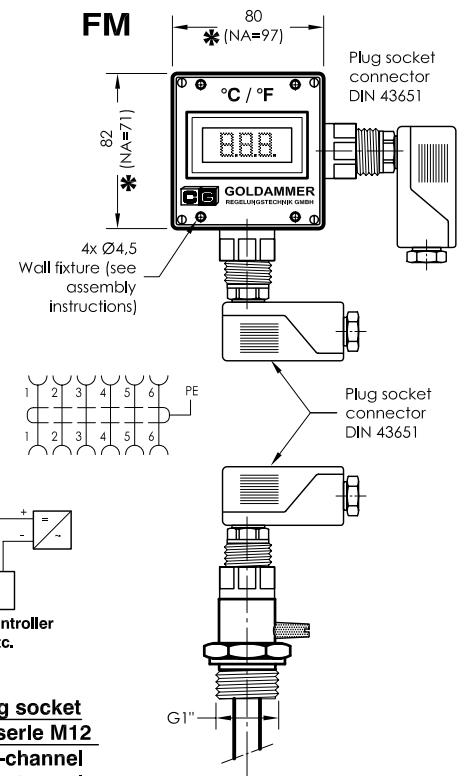
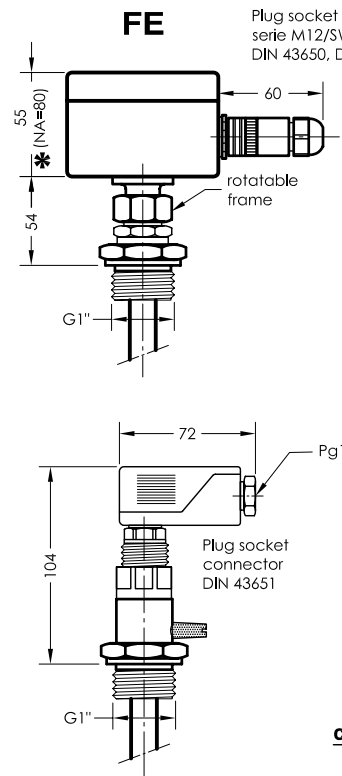
# NR 1" - DM - MA

## Level temperature regulator for tank insert 4-20 mA

serial No. Date  
 MA-GB- 314 12/02



**Plug securing**  
power supply



**Types plug socket connector serie M12**  
 M12/4 = 4-channel  
 M12/8 = 8-channel

- |                    |                    |
|--------------------|--------------------|
| <b>combined</b>    | <b>separate</b>    |
| 1 = level          | —                  |
| 2 = + level        | —                  |
| 1 = level          | 1 = level          |
| 2 = temperature    | 2 = + level        |
| 3 = +24VDC         | 3 = temperature    |
|                    | 4 = + temperature  |
| 1 = level          | 1 = level          |
| 2 = +24VDC         | 2 = + level        |
| 3 = -24VDC display | 3 = -24VDC display |
|                    | 4 = +24VDC display |
| 1 = level          | 1 = level          |
| 2 = temperature    | 2 = + level        |
| 3 = +24VDC         | 3 = temperature    |
| 4 = -24VDC display | 4 = + temperature  |
|                    | 5 = -24VDC display |
|                    | 6 = +24VDC display |

### Specimen order

### NR 1" - DM-MA-Ms-L300-T-NA-FE-O - M12/4

Pressure sensor type DM (specify static measuring level in mm + specify weight)  
 Ms=brass  
 VA=stainless steel  
 Total length-L switching tube (mm)

0 = combined  
 1 = separate  
 FE= permanent installation  
 FM=remote installation  
 \*NA= level display  
 TA = temperature display  
 T = temperature  
 0 = without temperature

**When using tank aeration filters: the filter elements must be cleaned at regular intervals !**

### Description

The level temperature regulator, type NR 1" - DM designed for container installation, is provided with a pressure sensor based on the piezoresistive effect, as well as a Pt100 resistor. Via cables of any length, level and temperature can be continuously evaluated for automatic control and display. The level and temperature dependent signal is converted in the integrated measuring transducer into a linear current change of 4-20 mA. Electrical connection to the voltage supply and to one or several controllers, stored-program controller or measuring Instruments must be made with a shielded cable for interference-free data signal transmission for all electronic areas. The level regulator is maintenance-free when nondeposit media are used. With optional digital level / temperature display. Display 3½ digit, 13mm high, LCD display. For remote installation, a low-loss connection between the display unit and sensor tube must be provided. **Specify static measuring level when ordering.**

### Technical data

Switching tube	Brass/stainless steel, Ø 20, max. L = 3000mm
Connection	Brass G1", SW41 / stainless steel
Nominal pressure	static
Temperature of medium	100°C max.
Adapter box	ABS IP65, in either °C or °F
Plug socket connector	DIN 43650 or DIN 43651 IP65 or serie M12 IP68
Operating voltage	12V ... 30V DC
Measuring range	4-20 mA , min. 30 mbar
Temperature range	0-100°C
Thermal element	Pt100
Linearity	0,5%
Load	RB = U-12V 20mA



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