Submersible hydrostatic level meters EMKOBAR

For level measurement of water in non-pressure reservoirs, drill holes, water wells, sumps, swimming pools etc.

- Stainless steel submersible probe
- Version with stainless steel sensor (for rain, drinking, or river water)
- or version with ceramic sensor (for lightly soiled, or sludge water)
- Precise customer choice of the measurement range up to 100 m
- Probe diameter 25 mm or 16 mm
- Over voltage protection inside probe

Technical specification		
Supply voltage	EMKOBAR-25S	**12 ... 36 V DC**
	EMKOBAR-25C	**12 ... 34 V DC**
	EMKOBAR-6N	**10 ... 30 V DC**
Output type		**4 ... 20 mA (2-wire)**
Output type (EMKOBAR-25S)		**0 ... 10 V (3-wire)**
Maximum measurment range		**100 m**
Accuracy (from full measured range)		**0,5%**
Ambient temperature range		**-20°C ... +70°C**

EMKOBAR-25S

Stainless steel sensor, measuring range from 1 to 100 m H_2O, arbitrary measurement ranges (customer configurable in 10 cm step). Probe diameter 25 mm. Current (4 ... 20 mA) or voltage (0 ... 10 V) output, Suitable for rain, drinking, or river water, certificate for contact with drinking water.

EMKOBAR-25C

Ceramic sensor, measuring range from 1 to 100 m H_2O, arbitrary measurement ranges (customer configurable in 10 cm step). Probe diameter 25 mm. Current (4 ... 20 mA) output. Suitable for clean, lightly soiled, or sludge water.

EMKOBAR-16N

Stainless steel sensor, measuring range from 1 m to 100 m H_2O, predefined measurement ranges. Probe diameter 16 mm. Current (4 ... 20 mA) output. Suitable for clean, lightly soiled, or sludge water.

Hydrostatic level measurement

The principle of level measurement is taken from direct dependence of hydrostatic pressure (p) on height of water column (h). where the constants of proportionality are the density (ρ) and the gravitation acceleration (g).

$$p = h.\rho.g$$

The method is resistant to the formation of foam on the level surface. The method is directly dependent on the density (specific gravity) of the liquid. When the liquid density is changing it is necessary to make an additional correction of the output.