

LEVEL - LIQUID LEVEL MEASUREMENT

B.6

CAPACITIVE LEVEL SENSORS

MODEL

CPA 01

Filling level measurement with liquids for metallic containers.



TECHNICAL SPECIFICATIONS

Operating voltage	12 - 32V DC	Process connection	BSP1/2", BSP1" of 1.4571 /PVDF
Output	4-20mA (2-wire)		length of the thread: 20 mm
Measuring accuracy	± 1% of measuring Length	Electrical connection	plug M12 or cable outlet
Environmental temp.	-30°C to +70°C	Probe length L	max. 2000 mm
Medium temperature	-30°C to +100°C	Casing	Ø 67 x 55 mm of 1.4301
Pressure	max. 16 bar	Sensor beam	Ø 5 mm made of stainless steel, coated with polyolefin
Protection class	IP65		

CHARACTERISTICS

- Analogous output 4-20mA
- Max. measurement range 2000 mm
- Simple calibration at key press
- Operating pressure max. 16 bar
- Vertical installation
- Thread BSP1/2", BSP1"
- Electrical connection: Cable outlet, plug M12
- Measuring accuracy ± 1% of final value of measurement range

PRINCIPLE

The sensor beam and the metal wall of the container form an electrical condenser when being immersed into the liquid. The capacity of the condenser changes with its filling level.

An electronic system integrated into the device converts the capacity change into an electrical standard signal 4-20mA proportionally to the filling level.

In case the values for 0% and 100% are to be adjusted as per the customer's requirements, calibration is made at keypress. When initially received from the manufacturer, the filling level probe is set to the start and end value of the measurement range.