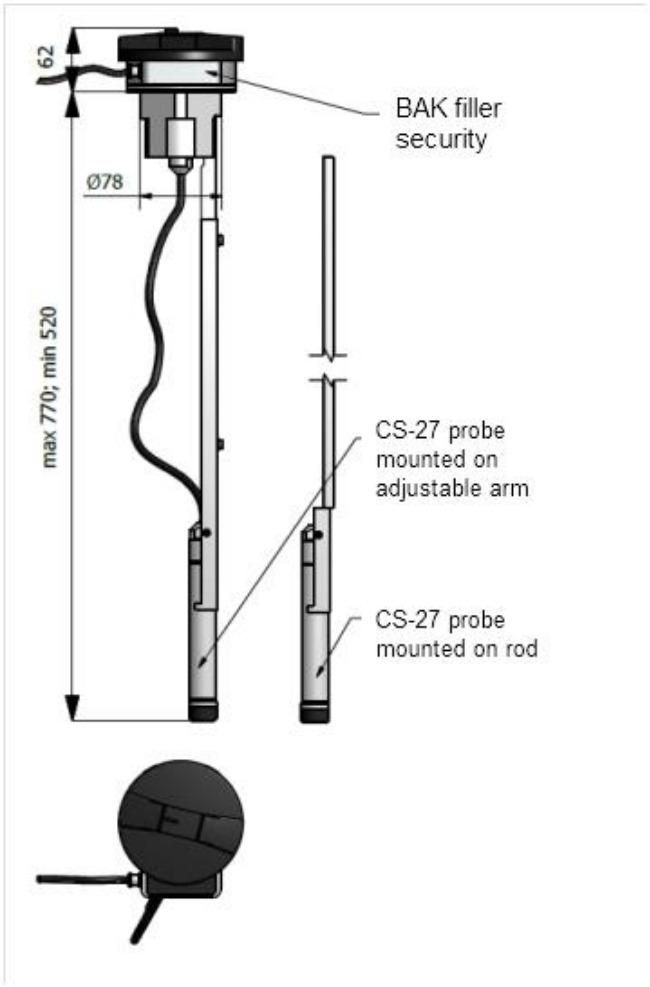
Hydrostatic fuel level probe
For installation on the fuel filler
CS-27/W; CS-27/BAK

- ✓ **Easy assembling the level probes on the tank fuel filler.**
- ✓ **Elimination of the holes boring in the tank.**
- ✓ **Additional sygnalization of the tank filler opening possibility.**
- ✓ **Regulation and bendig of the rod possibility.**



Structure

The CS-27/W hydrostatic fuel probe is designed for fuel level measurement in fuel tanks on vehicles, machinery and locomotives. The CS-27/BAK is a combination of the CS-27/W probe with a BAK filler security for monitoring access to the fuel filler on trucks, machinery, construction vehicles and others, optionally with additional event signaling system for the driver.

Structure and operation

The CS-27/W fuel level probe measures the hydrostatic pressure of liquid, whose values is proportional to the height of the column of liquid. The measuring element is a piezoresistive sensor separated from the medium with a separating membrane. Pressure measurement is done at the separating membrane of the submerged probe (5÷10mm above tank bottom) and related to atmospheric pressure or pressure inside the tank using a hose located inside a conduit. The electronic system is located in a steel housing of the sensor. The sensor is mounted with an extendable arm to aluminum housing which can be sealed. The CS-27/BAK itself has additional BAK fuel filler security. It is secured with monitoring of the presence of a transponder located in the fuel cap, above the CS-27/W probe mounted on the filler. The system alerts of removing the fuel cap as a change of output status, as well as sabotaging, cutting the wire, through signal loss in the communication conduit which can be connected to a monitoring system and/or to „CABIN SIGNALLING MODULE”.

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Technical parameters

Measurement range	0÷2000mm ON
Arm length In tank	max 770mm (custom made up to 2000mm)
Maximum range overload	≤ 100kPa
Fundamental error	≤ 0,16%
Hysteresis, repeatability	≤ 0,05%
Working temperature range	-25 ÷ 80°C
Compensation temperature range	-25 ÷ 50°C
Power voltage	8 ÷ 32VDC
Power intake:	
- with BAK fuel filler security	< 75mA
- without BAK fuel filler security	< 25mA
Analogue output Signac for probe	U/CS = (0,05…10)V
Binary output Signac for fuel filler security	U/BAK = (0,002…0,9) Uzas
RS-485 input/output signal:	
- differentia output voltage	min. ±1,5V
- input voltage	min. ±0,2V
RS-232LV input/output signal:	
- TXD output signal	HI > 3,0V; LO < 0,2V
- RXD input signal	HI > 2,0V; LO < 0,8V
Housing protection class	IP 68
Relative humidity	30…90%
Atmospheric pressure	80…120 kPa
Working position	Vertical

Ordering method

CS-27/___ **/** ___ **/** ___ **/** ___ **/** ___

BAK- with fuel filler secutity
W- without fuel filler secupity

80- filler diameter ø80
60- filler diameter ø60

-1- body with gland
-2- body with coupling

RS[1)]- Digital output signal
U[2)]- Voltage output signal

R- Sensor mounted on adjustable arm
P- Sensor mounted on bendable rod

1) With digital output Signac (RS), state inerface type: 232 or 485.
2) With voltage output Signac (U), stste voltage value: 0…10V or other.

Example marking:

CS-27/BAK/80/1/RS-485/R Fuel level probe with filler security, filler diameter ø80, body with gland, with RS-485 digital output, adjustable arm.

CS-27/W/80/2/U-0-10V/P Fuel level probe without filler security, fillerdiameter ø80, body with coupling, with voltage output 0…10V, bendable rod.

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