

## Dipstick Ex Analog 20...4 mA, type 6706-12

- Use for a fuel level gauge on refueller
- Flameproof enclosure
- Protection category IP 67



### Description

The dipstick returns the position of the float with a 4...20 mA current signal. The electronic circuit is inside flameproof enclosed stainless steel housing.

### Application

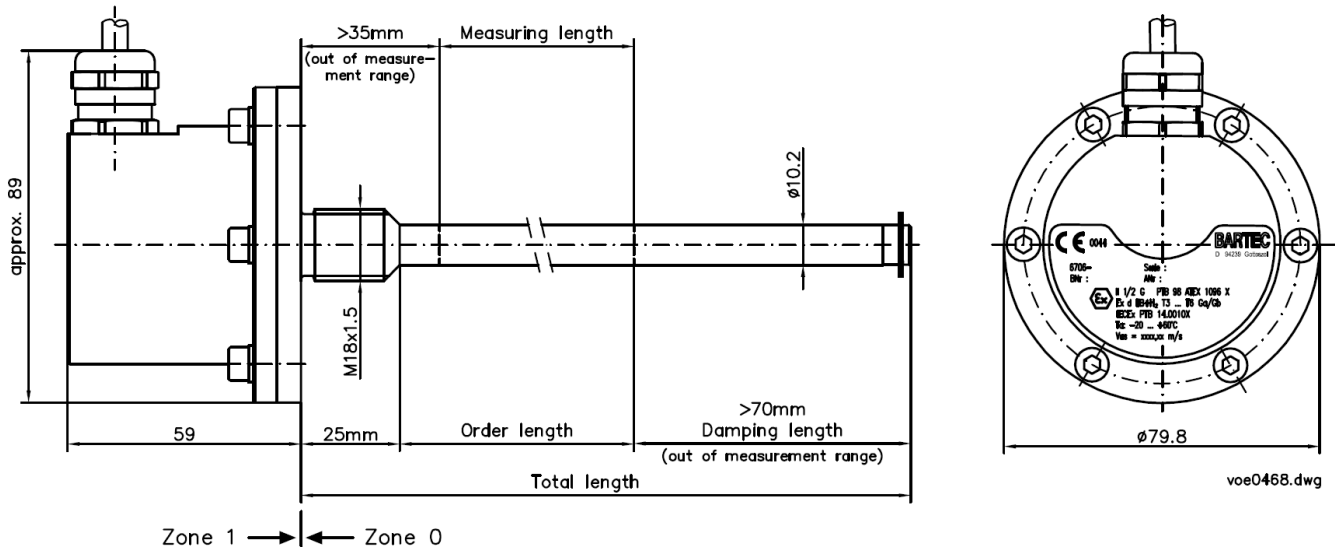
The dipstick can be used for determination the fuel level (Jet Fuel) of refueller.

### Function

The float with magnetics inside is moved along the dipstick. The position of the float is measured with a magnetostriptive sensor and is converted to a 4...20 mA current signal.

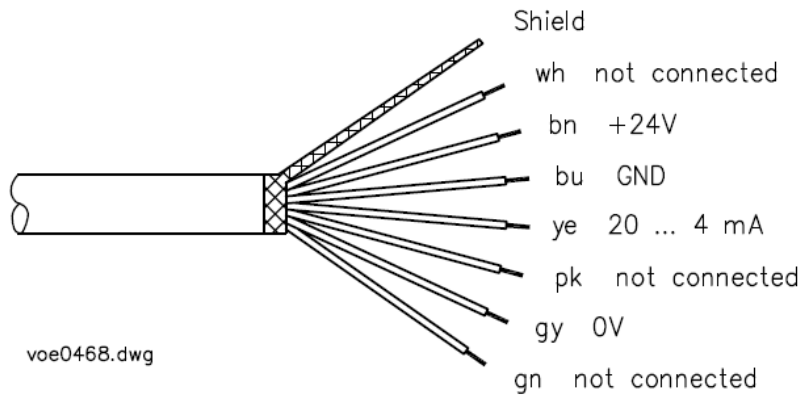
Technical data	
<b>Electrical data</b>	
Operating voltage	DC 24 V ± 10% (stabilized)
Ripple voltage	≤0.5V
Current consumption	≤130mA + output signal
Reproducibility	1µA
Measured data rate (max.)	1kHz
Temperature coefficient	0.76µA/°C
Output signal	20...4mA
Connecting cable	7 x 0.25 shielded, l = 15 m
<b>Mechanical data</b>	
Weight	Ca. 2kg/m
Housing material	Stainless steel
Equipment group/-category/ type of protection	II 1/2 G Ex d IIB + H <sub>2</sub> T3 ... T6 Ga/Gb
Certificates	PTB 98 ATEX 1096 X IECEX PTB 14.0010 X
Norms	EN 60079-0, EN 60079-1, EN 60079-26
Dimensional drawing	See dimensional drawing
Protection category per IEC 529	IP 67
<b>Ambient conditions</b>	
Ambient temperature	-20 ... +60 °C
Operating pressure	0.8 bar ... 1.1 bar
Shock load according to EN 60068	100g/6ms
Vibration according to EN 60068	12 g, 10 bis 2000 Hz
<b>Order details</b>	
Order	6706-12/xxxx/0, xxxx = Order length in mm
<b>Accessories</b>	
<b>Designation</b>	<b>Order number</b>
Flange for dipstick 20...4 mA, type 6706-120	373277
Terminal box analog dipstick 20...4 mA, type 6982-15	375336
Float, type 6706-109	279355

### Dimensional drawing



Standard nominal length of dipsticks (mm) within the range from 500 ... 3 500 mm  
**Order length = Overall length - 95 mm**

## Terminal assignment



### Installation instructions:

The safety regulations EN 60079-14, EN 50 018, EN 50 284 have to be complied with in the hazardous area. When the system is installed in metallic tanks, the potential equalization takes place via direct metallic contact. With insulated installation, a ground conductor or an equipotential bonding conductor has to be connected directly. All ground conductors and equipotential bonding conductors have to be joined in a ground point.

The connection cables of the dipsticks have to be stationary.

The mechanic connection to a tank wall, container wall or pipe wall has to be flameproof. This can be achieved by means of an integral thread M 18 x 1.5 and a depth of thread  $\geq 7.5$  mm (= 5 threads).

The connection cable must not be shortened or lengthened.

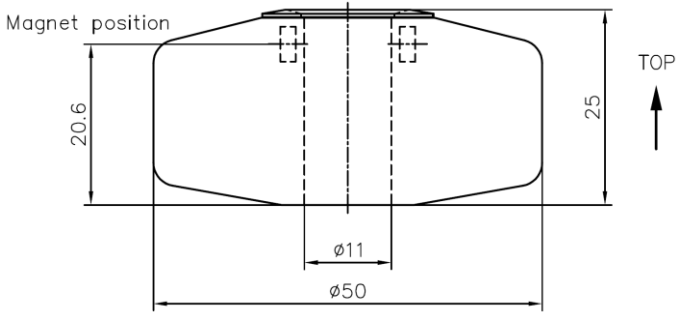
Application is only admissible:

- under operational atmospheric conditions (temperature = - 20 °C ... + 60 °C, pressure = 0.8 bar ... 1.1 bar)
- in group IIA or IIB (if H<sub>2</sub> is present, further restrictions with regard to the mechanic connection have to be observed, cf. EN 60079-26 in connection with EN 60079-1.
- with vertical installation

### Flange for dipstick 20...4 mA, type 6706-120

Flange	Type 6706-120
Dimensional drawing	
Housing material	Alu
Weight	1.1 kg
Operating temperature	-20 .... +60 °C

## Float

Float	Type 6706-109
Dimensional drawing	
Housing material	PA / NBR-Compound
Operating temperature	-20 .... +60 °C
Pressure load (static)	0.05 MPa = 0.5 bar max