Dipstick Ex Analog, Type 6706-11

- **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 voltage signal. The electronic circuit is inside flameproof enclosured stainless steel housing.

Application

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

Function

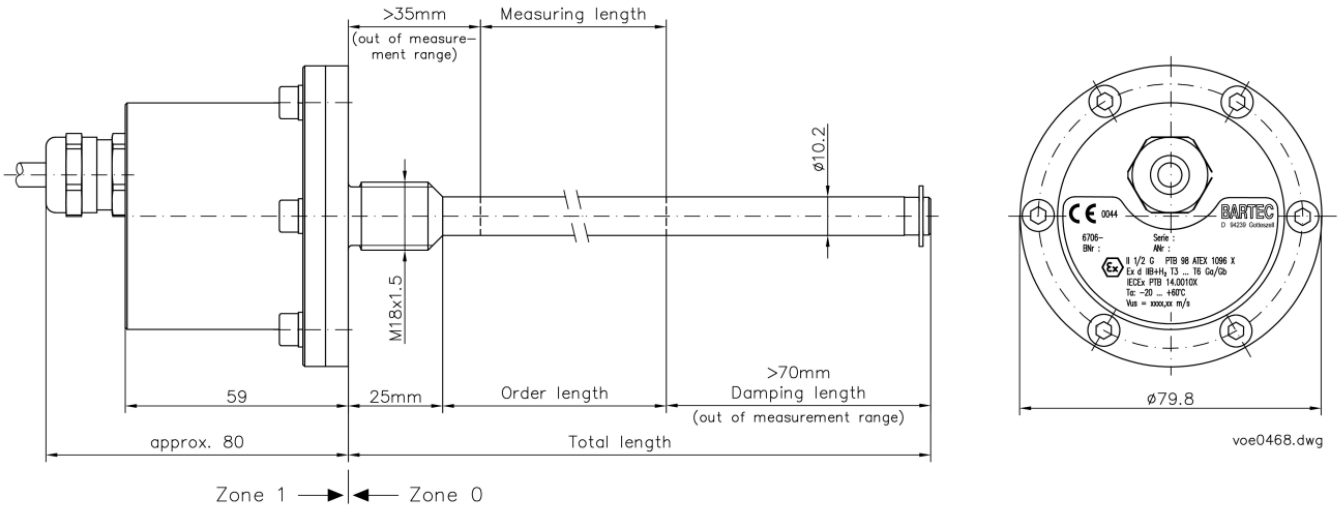
The float with magnetics inside is moved along the dipstick. The position of the float is measured with a magentostricitve sensor and is converted to a voltage signal.

BARTEC BENKE GmbH ● Schulstraße 30 ● D-94239 Gotteszell ● Phone +49 (0) 9929 301-0 ● Fax 301-112
E-mail: gotteszell@bartec-benke.de ● Internet: www.bartec-benke.de

Technical data	
Electrical data	
Operating voltage	DC 24 V ± 10% (stabilized)
Ripple voltage	≤0.5V
Current consumption	≤130mA + output signal
Reproducibility	0,5 mV
Measured data rate (max.)	1kHz
Temperature coefficient	200 µV/°C
Output signal	0 … V / 10V … 0V
Connecting cable	7 x 0.25 shielded, l = 15 m
Mechanical data	
Weight	Ca. 2kg/m
Housing material	Stainless steel
Equipment group/-category/ type of protection	II 1/2 G Ex d IIB + H_2 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
Ambient conditions	
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
Order details	
Order	6706-11/xxxx/0, xxxx = Order length in mm

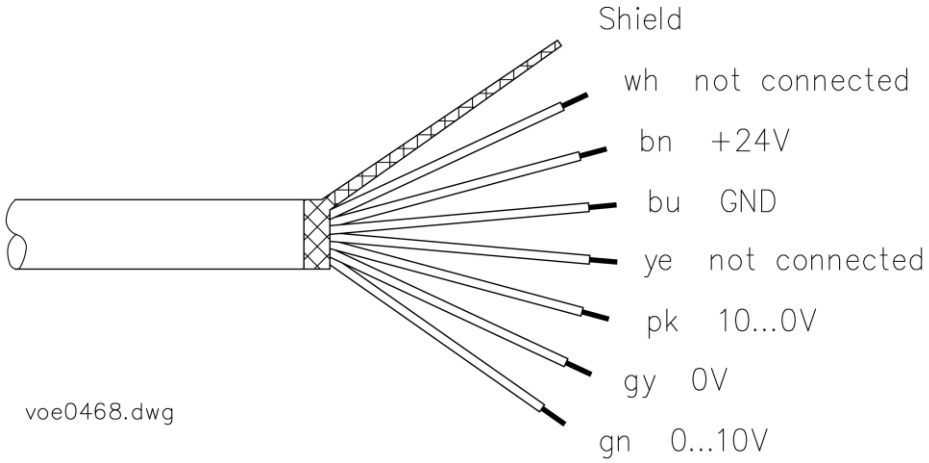
Accessories	
Designation	**Order number**
Flange for dipstick 20...4 mA, type 6706-120	373277
Float, type 6706-109	279355

Dimensional drawing



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

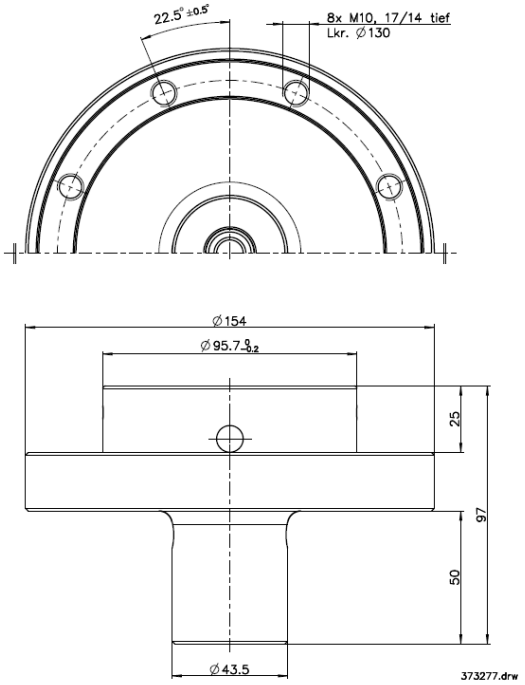
Terminal assignment



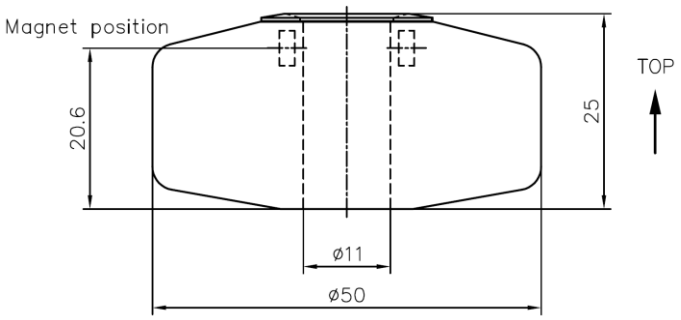
Installation instructions:
The safety regulations EN 60079-14, EN 50 018, EN 50 284 have to be complied with in the hazardous area. When the system is installed in metallic tanks, the potential equalization takes place via direct metallic contact. With insulated installation, a ground conductor or an 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 ≥ 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 H2 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