

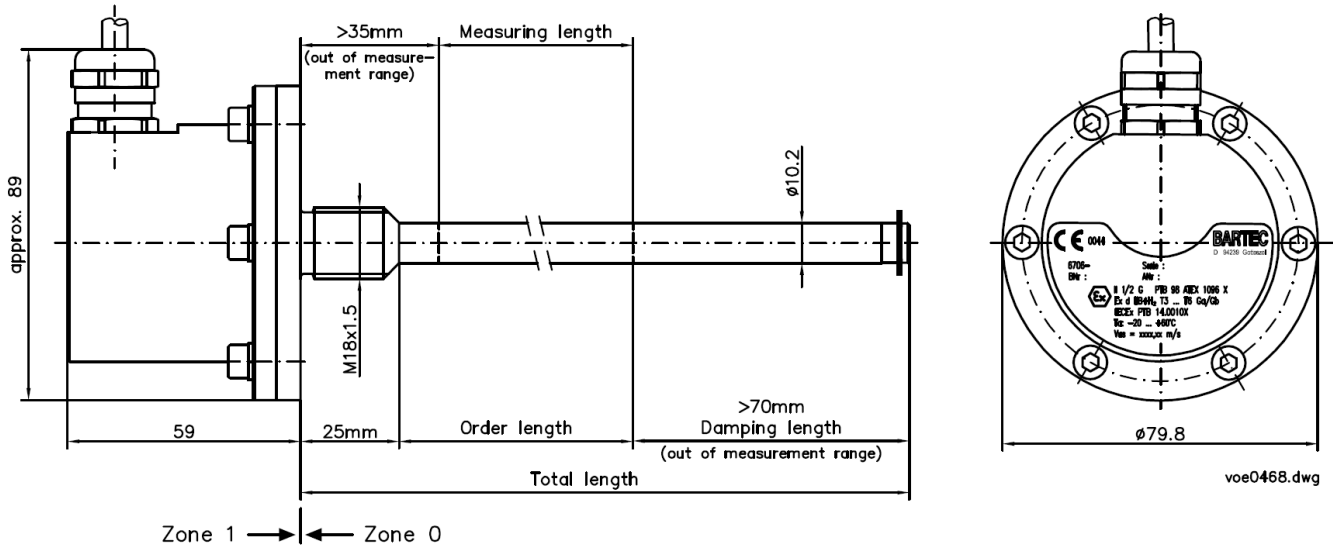
## Dipstick system, type 6706-10

- Measures the filling level of liquid goods with a high precision in zone 0.
- Can be used on tank trucks transporting a product or several products from a filling station to one or several unloading stations.
- Can also be used in stationary tanks.



Technical data	
<b>Electrical data</b>	
Operating voltage	DC 24 V ± 10% (stabilized)
Operating pressure	0,8 bar ... 1,1 bar max.
Ripple voltage	≤ 0.5%
Current consumption	≤ 80 mA
Power consumption	2 W
Resolution	≤ 10 μm
Hysteresis	≤ 10 μm
Reproducibility	≤ 20 μm
System resolution	≤ 5 μm
Measured data rate (max.)	f = 1kHz
Temperature coefficient	≤ 10 ppm/ °C
Interface	2 x RS 485
Connecting cable	7 x 0.25 shielded l = 15m
Shock load (according to DIN 60068)	50 g / 11 ms
Vibration (according to DIN 60068)	6 g, 10...150 Hz
Material	Flange and measured distance:                      Stainless steel 1.4571
<b>Ambient conditions</b>	
Ambient temperature	-20 ... +60 °C
Protection type	IP67
Equipment group/-category/type of protection	II 1/2 G   Ex d II B + 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 IEC 60079-0, IEC 60079-1
<b>Order designations</b>	
Designation	Order number
Dipstick system	6706-10/xxxx/0, xxxx = długość zamawiania w mm

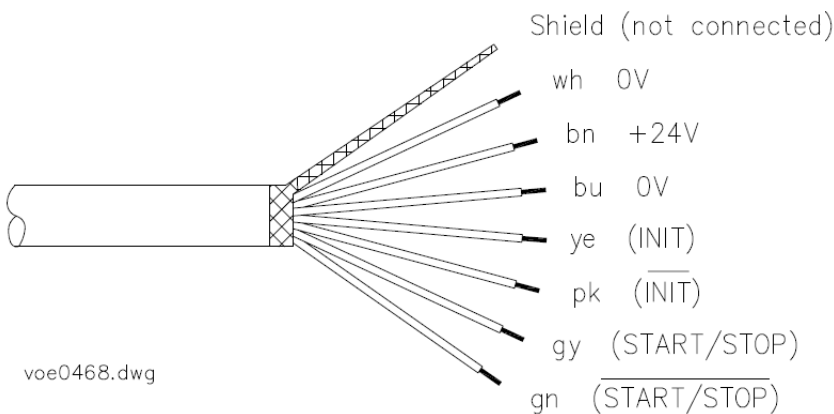
## Assembly



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

Float types	Type 6706-100	Type 6706-103
Dimensions	<p>205687.dwg</p>	<p>205687.dwg</p>
Casing	Polymethacrylimid	Stainless steel 1.4571, WIG-welded
Weight	11,5 g	34 g
Operating temperature	-20 ... +60 °C	-20 ... +120 °C
Pressure load (static)	0,05 MPa = 0,5 bar (higher pressures on request)	1 MPa = 10 bar max.
○ = Magnet position	If two floats are applied, the distance between the magnets must be > 70 mm.	
Order no.	205687	U496602
Float types	Type 6706-109	
Dimensions		
Casing	PA / NBR-Compound	
Weight	11,5 g	
Operating temperature	-20 ... +60 °C	
Pressure load (static)	0,05 MPa = 0,5 bar max.	
○ = Magnet position	If two floats are applied, the distance between the magnets must be > 70 mm.	
Order no.	279355	

Reference sensor	Type 6706-101 series A	Type 6706-102 series A
Dimensions	<p>db670601.dwg</p>	<p>db670602.dwg</p>
Casing	Aluminium	Aluminium
Weight	1.1 kg	0.15 kg
Operating temperature	-20 ... +60 °C	-20 ... +60 °C
⊙ = Magnet position	The distance between the magnets of the reference sensor and the float must be > 70 mm.	
Order no.	205686	209237
Reference sensor	Type 6706-105 series B	Type 6706-107 series A
Dimensions	<p>232253.dwg</p>	
Casing	Aluminium	Aluminium
Weight	0.9 kg	1.2 kg
Operating temperature	-20 ... +60 °C	-20 ... +60 °C
⊙ = Magnet position	The distance between the magnets of the reference sensor and the float must be > 70 mm.	
Order no.	232253	234622

Reference sensor	Type 6706-115 Serie A	Type 6706-116
Dimensions		
Casing	Alu	Alu
Weight	1,3 kg	1,2 kg
Operating temperature	-20 ... +60 °C	-20 ... +60 °C
⊙ = Magnet position	Der Abstand zwischen den Magneten von Referenzgeber und Schwimmer muss > 70 mm sein.	
Order no.	313106	421223