


VISY-Stick measuring probes


Technical Data





Probe	VISY-Stick Basic / Standard	VISY-Stick Advanced	VISY-Stick Interstitial	VISY-Stick Sump	VISY-Stick LPG	VISY-Stick Ethanol (>10%)
Explosion protection	II 1/2 G EEx ia IIC T6 II 1 G EEx ia IIC T4	II 1/2 G EEx ia IIC T6 II 1 G EEx ia IIC T4	II 1/2 G EEx ia IIC T6 II 1 G EEx ia IIC T4	II 1/2 G EEx ia IIC T6	II 1/2 G EEx ia IIC T6	II 1/2 G EEx ia IIC T6 II 1 G EEx ia IIC T4
Approvals	TÜV 99 ATEX 1496, NEPSI, IECEx	TÜV 99 ATEX 1496, NEPSI, IECEx	TÜV 99 ATEX 1496, NEPSI, IECEx	TÜV 99 ATEX 1496, NEPSI, IECEx	TÜV 99 ATEX 1496, NEPSI, IECEx	TÜV 99 ATEX 1496, NEPSI, IECEx
Protection class	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
Material	1.4301/304 (probe tube), 1.4305/303 (sensor head)	1.4301/304 (probe tube), 1.4305/303 (sensor head)	1.4301/304 (probe tube), 1.4305/303 (sensor head)	1.4301/304 (probe tube), Al (sensor head, conduit), PET	1.4301/304 (probe tube), 1.4305/303 (sensor head)	1.4301/304 (probe tube), 1.4305/303 (sensor head)
Probe lengths (Standard) Other lengths on request	2.00 m (tank ø 1.60 m), 2.40 m (tank ø 2.00 m), 2.90 m (tank ø 2.50 m), 3.30 m (tank ø 2.90 m)	2.00 m (tank ø 1.60 m), 2.40 m (tank ø 2.00 m), 2.90 m (tank ø 2.50 m), 3.30 m (tank ø 2.90 m)	Customized	Ø 65 mm x 550 mm (Total length including connectors), available with this version only	1.40 m (tank ø 1.25 m), 2.00 m (tank ø 1.60 m)	2.00 m (tank ø 1.60 m), 2.40 m (tank ø 2.00 m), 2.90 m (tank ø 2.50 m), 3.30 m (tank ø 2.90 m)
Process connection	Screw-in unit R1½, brass, for height adjustment (with R2 reducer, steel)	Screw-in unit R1½, brass, for height adjustment (with R2 reducer, steel)	Screw-in unit R1½, brass, for height adjustment (with R2 reducer, steel)	—	Screw-in unit ½" NPT, stainless steel	Screw-in unit R1½, brass, for height adjustment, (with R2 reducer, steel)
Option	- R1 installation kit (not for biodiesel) - Screw-in unit, SS - Pipe installation (riser) - Conduit G¾ adapter	- Screw-in unit, Stainless steel - Pipe installation (riser) - Conduit G¾ adapter	- R1 installation kit - Screw-in unit, SS - Pipe installation (riser) - Conduit G¾ adapter	- Installation kit - Conduit	- Reducer, ½" NPT, SS - LPG installation kit with flange and G½ - Conduit G¾ adapter	- R1 installation kit - Screw-in unit, SS - Pipe installation (riser) - Conduit G¾ adapter
Electrical connection	M12 connector for cable terminal	M12 connector for cable terminal	M12 connector for cable terminal	M12 connector for cable terminal	M12 connector for cable terminal	M12 connector for cable terminal
Option	Battery-powered radio transmitter for data trans- fer to the control unit	Battery-powered radio transmitter for data trans- fer to the control unit	—	—	Battery-powered radio transmitter for data trans- fer to the control unit	Battery-powered radio transmitter for data trans- fer to the control unit
Sensor head	Ø 50 mm x 92 mm	Ø 50 mm x 92 mm	Ø 50 mm x 92 mm	built-in	Ø 50 mm x 92 mm	Ø 50 mm x 92 mm
Product float	Ø 43 mm x 43 mm	Ø 54 mm x 33 mm	Ø 43 mm x 43 mm	built-in	Ø 40 mm x 120 mm	Ø 43 mm x 43 mm
Water float	Ø 43 mm	Ø 43 mm x 62 mm	—	built-in	—	—
Accuracy: Product	±2.0 mm (Basic) ±0.5 mm (Standard)	±0.25 mm	±0.5 mm	±1.0 mm	±2.0 mm	±2.0 mm (Basic) ±0.5 mm (Standard)
Accuracy: Water	±2.0 mm	±2.0 mm	—	±2.0 mm	—	—
Accuracy: Temperature	±2.0 °C (20 °C) (Basic) ±1.0 °C (20 °C) (Standard)	±0.3 °C (20 °C)	±2.0 °C (20 °C)	±2.0 °C (20 °C)	±1.0 °C (20 °C)	±2.0 °C (20 °C) (Basic) ±1.0 °C (20 °C) (Standard)

Safety instructions and mounting advises

 **When installing and servicing the VISY-Stick probes, the requirements of ExVo (German Ordinance on Explosion Protection) and BetrSichV (German Ordinance on Industrial Safety and Health) and of equipment safety law must be observed, as must the generally accepted technical regulations and these operating instructions.**

 **Also observe any local safety regulations and accident prevention regulations which are not stated in these mounting instructions.**

 **During assembly, it is important to make sure that the probe tube is not bent. Protect the floats from knocks at all times. Moisture must not be allowed to enter the M12 connector.**

 **Before you install the VISY-Stick, move the float to the bottom end of the probe tube, otherwise it will slip down suddenly when you erect the VISY-Stick and could be damaged when it strikes the circlip.**



During installation, you will need to make a note of the following data relating to the VISY-Sticks, tanks and products:

- Serial numbers of the probes,
 - Tank assignment of the probes,
 - Tank assignment of the product types,
 - Terminal assignment of the probes in the VISY-Command,
 - Probe distance from the central vertical axis for the installation offset
- These data are required for configuration of VISY-Command.*



For identification purposes, the probe heads of the special VISY-Stick models are wrapped in a coloured net, which must be removed prior to installation:

<i>VISY-Stick N for AdBlue:</i>	<i>blue marking</i>
<i>VISY-Stick Interstitial:</i>	<i>brown marking</i>
<i>VISY-Stick LPG:</i>	<i>yellow marking</i>
<i>VISY-Stick Biodiesel:</i>	<i>green marking</i>
<i>VISY-Stick Ethanol (>10%):</i>	<i>orange marking</i>
<i>VISY-Stick E10 (5-10%):</i>	<i>neutral marking</i>
<i>VISY-Stick Standard / Basic / Advanced:</i>	<i>neutral marking</i>

The detailed technical documentation of VISY-Stick measuring probes can be found at the web site: www.fafnir.de .

Mounting of VISY-Stick measuring probes with screw in unit (short description)

For installation of the VISY-Stick Basic or Standard probe, the tank pipe coupling must have an internal thread of at least 1½"; for the VISY-Stick Advanced sensor, it must have an internal thread of at least 2".

The procedure for installing probes with screw-in units is described below. For tank pipe couplings with an internal thread larger than 1½", reducers of the appropriate size will also be required:

- (1) Check that the circlip on the end of the probe tube is securely located so that the float is unable to fall off into the tank.
- (2) The floats must be pushed onto the probe tube with the marking "TOP" facing the sensor head.
- (3) Use a hexagon socket key (5 mm) to loosen the locking screw and stuffing box (SW 30, SW = spanner width) so that the screw-in unit can be moved easily on the probe tube.

- (4) Provide the screw-in unit with suitable sealing material and then screw it into the tank pipe coupling together with the VISY-Stick.
- (5) Press the probe tube gently onto the bottom of the tank and then lift it 5 to 10 mm to create a safety clearance. To secure the probe tube, first tighten the stuffing box and then the locking screw.



If there is no safety clearance between the probe tube and the bottom of the tank, the tube could be bent and damaged by the tightening process.

- (6) Connect earthing and equipotential bonding cables to the exterior earth terminal.
- (7) Connect the supplied M12 connection cable to the VISY-Stick. First tighten the union nut of the M12 connector by hand and then tighten it further through 180° using a spanner.