



Outside wall storage tracer (OWST kit)

ACE-DS-613506-v02-e

datum : 17-01-2022

Product composition

The outside wall storage tracer (OWST kit), or high-rise building plug, should significantly accelerate the connection of high-rise buildings to the fibre optic network compared to conventional construction methods. The OWST kit consists of a number of parts:

- Tube
- Tracer
- Magnet
- EPDM centring foam
- EPDM closing foam



All parts of the OWST kit are developed for an expected lifetime of 25 years minimum under normal conditions.

Functionality

OWST is a FTTH installation solution for multi dwelling units. Depending on the wall thickness, the product offers space for the temporary storage of 2 fibers with a length of approximately 1.5 metres.

OWST can be used in combination with several cable products. TKF strongly recommend to use the U-MDC cable; a Ø4 mm cable with excellence performance in fire scenario. Refer to <https://www.tkf-telecom.eu/u-mdc-b2ca.html> for more information about this cable.

Other cable types can be applied by using a Ø3 mm tube and a transition clip for adaptation of the tube to the cable. The tube is coiled into the OWST tube.

More information of the Ø3 mm tube can be found at <https://www.tkf-telecom.eu/613541.html>.

Information of the transition clip is available at <https://www.tkf-telecom.eu/613508.html>.

The cable or tube is coiled over the certain length and secured to the tracer of the OWST. The entire assembly is stored in a PVC tube with an outer/inner dimension of Ø25/22 mm

The OWST is equipped with a magnet. With the help of a locator, the exact position of the magnet can be found in the wall of the apartment. By drilling a hole from the apartment, the OWST can be 'fished in' together with the stored length of cable or tube.



Parts kit

The regular OWST is delivered as a composed product and available under article number 613506. A kit contains the parts listed below.

Tracer

The tracer is an important part of the kit.

3 Functionalities are integrated:

- 1- Container of the magnet
- 2- Housing for a SC-connector
- 3- Cable fixation

Cable fixation offers the possibility to fix cables (tubes) with a diameter (range) of Ø3 - 4 mm, Ø1.8 mm or Ø900 µm.



Material		ABS
Pulling force - max	[kg/cm ²]	480
Length	[mm]	112.75
Maximum diameter	[mm]	Ø 11.7
Shore-D hardness		75 ± 2
Colour		White (similar to RAL9010)

Tube

PVC-U has very good chemical and electrical properties. It is not resistant to UV-radiation. PVC-U has been shown to be physiologically harmless.



Material		PVC-U – fully recyclable
Color		Fully colored – grey (RAL 7011)
Diameter	[mm]	25
Wall thickness	[mm]	1.5
Length	[m]	0.23 (standard)
Weight	[kg]	0.175
Classification		PN10
Temperature range:	[°C]	
- During operation		-20 ~ 70
- Installation		0 ~ 45
- Transport		-5 ~ 45

Magnet

The magnet is located in the front part of the tracer and serves as a detection element.



Shape		bar
Diameter	[mm]	Ø 8
Height	[mm]	30
Material		NdFeB
Coating		Nickel-plated (Ni-Cu-Ni)
Weight	[g]	11

Disposal tips

Small amounts of used neodymium magnets can be thrown out with the regular trash. Larger amounts of magnets need to be recycled as scrap metal.



EPDM centring foam front

The EPDM foam on the front fills the space around the tracer and the inside of the tube. A second functionality of the foam on the front is to centre the tracer.



Material		EPDM
Length	[mm]	40
Diameter	[mm]	Ø22
Diameter hole	[mm]	Ø14

EPDM closing foam back side

The foam should close the duct when the tracer and cable are properly installed. The foam acts as a barrier for the adhesive kit that seals the tube.



Material		EPDM
Length	[mm]	10
Diameter	[mm]	Ø22

Logistics information

The OWST kit is packed per set. 25 Pieces are packed in a cardboard box.
Box dimensions 250 x 185 x 100 mm (l x b x h)