

Duct Sondes

- For tracing ducts, pipes and sewers and their blockages
- Five diameters: 6mm, 7mm, 9mm, 18mm and 42mm
- Three transmitting frequencies: 512Hz, 10kHz and 33kHz

Three new models!



Choose a sonde according to the target duct material and size.



Push the sonde into the duct. If the sonde gets stuck to a blockage...



...locate the sonde & blockage above ground with a cable locator.



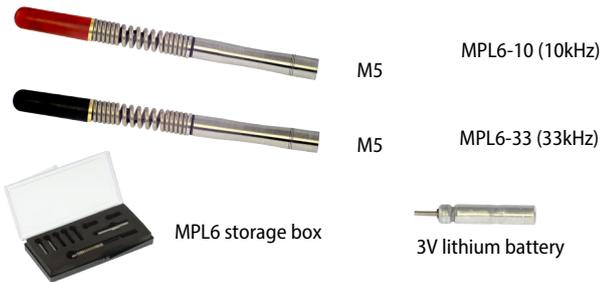
Sondes for fiberoptic microducts - MPL6, MPL7 and MPL9

Microduct sondes are small transmitter sondes especially intended for calibrating and locating fiber optic microducts and their blockages e.g. before jetting fibers. Sondes can be jetted in a duct on its own or mounted to the tip of a micro cable. They can also be mounted to a push rod using the M5 or M6 tread in the end of their battery compartment.

Microduct sondes have flexible construction which helps them pass duct curves. Sondes have a power-on led in their tip. They are packed in a handy plastic storage box with two lithium batteries.



MPL6 microduct sondes (6.4mm)



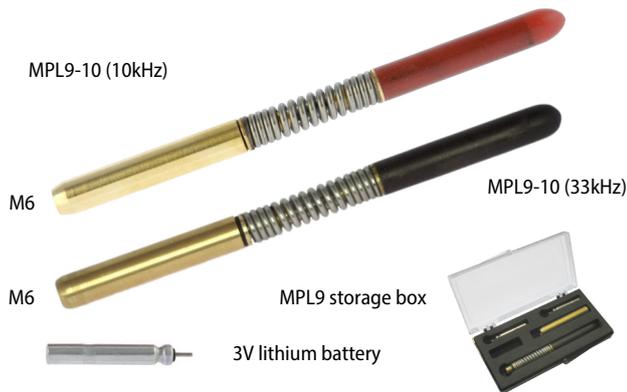
Basic setup: MPL6-10 or MPL6-33 microduct transmitter, battery compartment with M5 mounting, 2 pcs 3V lithium batteries, plastic storage box, user manual.

MPL7 microduct sondes (7.5mm)



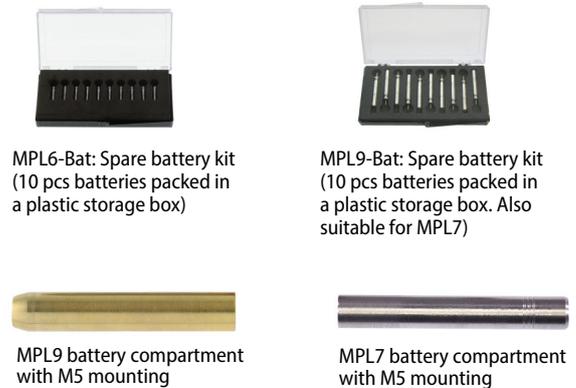
Basic setup: MPL7-10 or MPL7-33 microduct transmitter, battery compartment with M6 mounting, 2 pcs 3V lithium batteries, plastic storage box, user manual.

MPL9 microduct sondes (9mm)



Basic setup: MPL9-10 or MPL9-33 microduct transmitter, battery compartment with M6 mounting, 2 pcs 3V lithium batteries, plastic storage box, user manual.

Microduct sonde accessories



Microduct sonde models & versions and features

Model	Sonde diameter	Frequency	Signal type	Range in free air	Range in cast iron duct	Battery type	Battery life	IP / IK code
MPL6-10	6.4 mm	10 kHz	Interrupted	1.2 m	0 m	4x25 mm	10 h	IP67 / IK03
MPL6-33	6.4 mm	33 kHz	Continuous	2.3 m	0 m	4x25 mm	10 h	IP67 / IK03
MPL7-10	7.5 mm	10 kHz	Interrupted	3.3 m	0 m	5x35 mm	9 h	IP67 / IK07
MPL7-33	7.5 mm	33 kHz	Continuous	5.1 m	0 m	5x35 mm	9 h	IP67 / IK07
MPL9-10	9.0 mm	10 kHz	Interrupted	3.5 m	0 m	5x35 mm	10 h	IP67 / IK07
MPL9-33	9.0 mm	33 kHz	Continuous	5.7 m	0 m	5x35 mm	10 h	IP67 / IK07

Indicated ranges are typical tracing distances with the Vesala CL43 receiver. Maximum range is usually longer. 10kHz and 33kHz frequency does not work with metal ducts.

Sondes for heavy use - PL18 and PL42

PL18 sondes are powerful and robust. They can be used to locate ducts, conduits and sewers with a minimum Ø28 mm and their blockages. PL18-10 and PL18-33 are ideal for non-conductive ducts, such as plastic and concrete. PL18-05 works also with cast iron ducts and limitedly with ducts made of other metals such as and stainless steel.

PL42-05 is Vesala's most powerful transmitter particularly for metal ducts.

PL18 and PL42 sondes have an M12 thread in their battery compartment end for push rod mounting. The PL18-FM flexible mounting adapter (accessory) enables PL18-sonde travel through corners. With PL18-FM it is also possible to use M6 threaded rods. For rods with M5 and M10 mounting a special mounting adapter PL-MSA (accessory) is available.

All sondes have a power-on LED. PL18 sondes are packed in a handy plastic storage box with one lithium battery. PL42-05 is packed in a small carrying/storage case including 8 pcs AA/LR6 batteries.



PL18-FM and PL18-05

PL42-05 duct sonde (42mm)



PL42-05 (512Hz)

New & powerful

M12

Basic setup: PL42-05 duct sonde, battery compartment with M12 mounting, 8 pcs 1.5V alkaline batteries, plastic carrying/storage case, user manual.

Duct sonde accessories



PL-MSA, mounting adapter, from M12 to M10 and M5



3.6V lithium spare battery (for PL18 sondes)



Flexible

PL18-FM flexible mounting adapter, with M6 and M12 thread

PL18 duct sondes (18mm)



M12

PL18-10 (10kHz)



M12

PL18-33 (33kHz)



M12

PL18-05 (512Hz)



PL18 storage box (PL18-33 standard contents depicted)



Sondes have a blinking power on LED. Light goes off when battery is weak.

Basic setup: PL18-05, PL18-10 or PL18-33 duct sonde, battery compartment with M12 mounting, 1 pc 3.6V lithium battery, plastic storage box, user manual.

Duct sonde models & versions and features

Model	Sonde diameter	Frequency	Signal type	Range in free air	Range in cast iron duct	Battery type	Battery life	IP / IK code
PL18-05	18 mm	512 Hz	Continuous	5.3 m	3.5 m	LS14250	8 h	IP68 / IK08
PL18-10	18 mm	10 kHz	Interrupted	5.0 m	0 m	LS14250	40 h	IP68 / IK08
PL18-33	18 mm	33 kHz	Continuous	10 m	0 m	LS14250	20 h	IP68 / IK08
PL42-05	42 mm	512 Hz	Continuous	13 m	8.4 m	8 x LR6	5 h	IP68 / IK08

Indicated ranges are typical tracing distances with Vesala the CL43 receiver in free air or from cast iron duct. Maximum range is usually longer. 10kHz and 33kHz frequency does not work with metal ducts.

Where and how to use duct sondes

Cable ducts, conduits, pipes, fiberoptic microducts and sewers and their blockages can be located with Vesala's duct sondes and compatible receivers. Exact locating considerably saves working time and helps avoiding unnecessary excavation.

Microduct sondes in particular can be used for duct calibrating: The sonde is jetted on its own through the duct to ensure that the duct is OK for jetting a fiber. If the sonde gets stucked, it can be located above ground accurately.

The suitable sonde is chosen according to the task: The bigger sonde can be used, the more robust it is and the longer tracing distance it enables. Big sondes are usually pushed into a duct with a push rod whereas jetting with compressed air is the typical method with microduct sondes.

Below table lists approximate duct inner diameters suitable for different sonde models. Curved diameter stands for a typical 90 degree curve through which a sonde can be pushed using a push rod.

Sonde model	Straight duct minimum diameter	Curved duct minimum diameter
MPL6-XX	8 mm	13 mm
MPL7-XX	9 mm	15 mm
MPL9-XX	10 mm	17 mm
PL18-XX	21 mm	28 mm
PL42-05	50 mm	200 mm

Transmitted frequencies and duct materials

- **10kHz** frequency (red sondes) is interrupted (pulsed) which makes it easily distinguishable from noises. 10kHz is suitable for locating non-conductive ducts and it is compatible with many Vesala receivers such as CL43 and CTR45.
- **33kHz** frequency(*) (black sondes) is very suitable for locating non-conductive ducts. It is compatible with Vesala CL43 receiver and other brand 33kHz locators.

- **512Hz** frequency (green sondes) is intended to be used especially with cast iron and stainless steel ducts, though other duct materials can be used too. Vesala CL43 is the best choice for the receiver but other brand 512Hz receivers can be used as well.

(*) Exact frequency 32,768Hz

Receivers for sonde locating

CL43 Compact locator

CL43 is a handy and affordable locator which can be equipped with a selection of sondes and probes according to customer preference. CL43 works with all Vesala sonde frequencies.

By adding the CTT33 transmitter to the equipment, CL43 locator can be used as a full featured cable locator.



Other receivers

10kHz sondes are compatible with Vesala's 10kHz receivers such as the CTR45 Set in the image.

With 512Hz and 33kHz sondes other brand 512Hz / 33kHz locators can be used.



Push rods

Large sondes are typically pushed to ducts with a push rod. Rods are available in various lengths and rigidities. Rods are packed in a loop frame from which rod can be pulled out just the length needed. Vesala supplies rods with an M5 or M12 thread.



© H. VESALA Ltd. 1704. VESALA is a registered trademark of H.Vesala Ltd., Finland. Contents subject to change without notice.

Messkom Vertriebs GmbH
Awarenring 38
D-85419 Mauern

Tel: 0049 (0)8764 / 948 430
Fax: 0049 (0)8764 / 948 433
Email: info@messkom.de
Web: www.messkom.de

