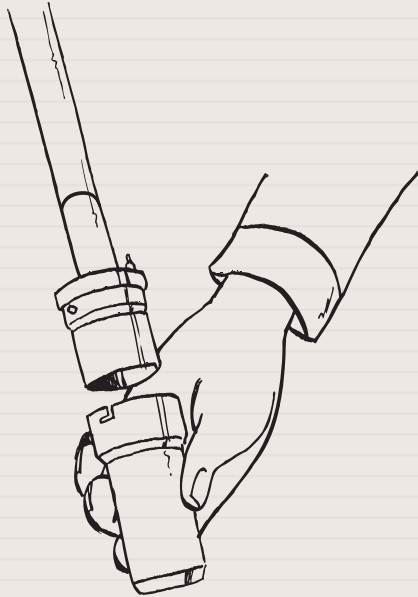


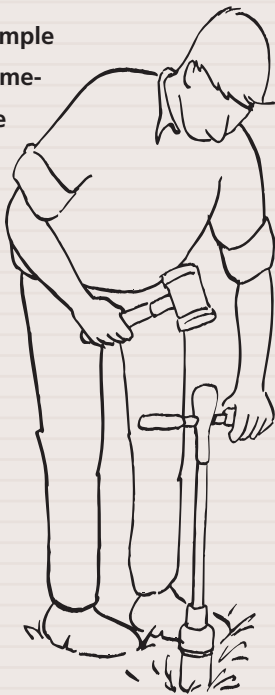


P1.31

The soil sample ring is placed in a closed ring holder.



The soil sample ring is hammered into the soil applying an impact absorbing hammer.



## BENEFITS

### 07.53.SC Soil sample ring kits

- Three available and accurate diameters
- Can be hammered; applicable in all soils
- Sample ring protected by closed ring holder
- Kit allows sampling at surface and at depth
- Valve system can be cleaned easily

# SOIL SAMPLE RING KITS

**07.53.SC** Sample ring kit, model C, for all soils to a depth of up to 2 m

**07.53.SE** Sample ring kit, model E

The sample sets with postfix SC and SE, for very hard soils, can be used to take samples in virtually all soils. The samples can be taken on the surface, in auger holes or in profile pits, above as well as under the groundwater level. The closed ring holder in this set is fitted with a conical threaded connection which means that the ring holder may also be hammered into the soil with an impact absorbing hammer.

The set, among other items, contains: a closed ring holder, a handle with beating head, an Edelman- and a Riverside auger, extension rods, a hammering head with a guide cylinder, an aluminium case with soil sample rings and various accessories.

The sample sets with the postfix SC can be obtained for soil sample rings with a diameter of 53, 60 and 84 mm. The most commonly applied (standard) diameter is 53 mm (07.53.SE is only available in the diameter 53 mm).

## Soil sample rings

Soil sample rings are stainless steel rings made of seamless tubes, smooth inside and out. The bottom of the ring has a cutting edge. The dimensions, and thus the volume content, of soil sample rings are exactly known, which makes them highly suitable for laboratory studies. With soil sample rings undisturbed samples are taken.

These are then used for, for example:

- The moisture content at various moisture tensions, from which a pF-curve can be made.
- The water permeability.
- The air permeability.
- The weight by volume.
- The density.
- The soil-water-air relationship at field capacity.
- The pore distribution.
- The oxygen diffusion.

Soil sample rings are transported in special aluminium cases, strong and resistant against humidity and heat.



Sample ring kit for all soils

# SOIL SAMPLE RING KITS

## Open ring holder

In case of an open ring holder, the ring is locked in the holder by means of a lever.

Over the ring about 4 cm headroom is left, allowing for an oversize sample to be taken.

Advantages of the ring holder are:

- The soil sample ring is very easily replaced.
- The ring holder is relatively insensitive to dust and dirt.
- Little resistance to penetration.

Disadvantages of the ring holder are:

- The sample is not oversized at the bottom end of the ring.
- In very weak soils, or below the water table, there is a great risk of the sample falling out of the ring.
- Sample rings may be lost through being overloaded and/or being incorrectly clamped.
- Because the sample ring is not protected, it can be damaged.



Soil sample rings in case

## Closed ring holder

With this type of ring holder, the soil sample ring is placed in a cutting shoe. The ring is clamped inside the cutting shoe and no water or soil can come into the ring from the top side.

Advantages of this ring holder are:

- The sample is oversized on both sides.
- No risk of losing a sample.
- The sample ring is in a protected position inside the cutting shoe, there is no risk of losing or damaging the ring.

For very hard soils we offer a special ring holder in a stronger (heavier) design (07.53.SE).

## Hammering head with guide cylinder

The hammering head with guide cylinder is used for filling soil sample rings in hard soil layers both on the surface and in profile pits. The sample ring is clamped to the hammering head by means of a retaining ring. The guide cylinder ensures that the sample is taken in a true straight line. The soil sample ring can simply be dug out or extruded using the bent spatula.



Soil sample rings



Closed and open ringholder

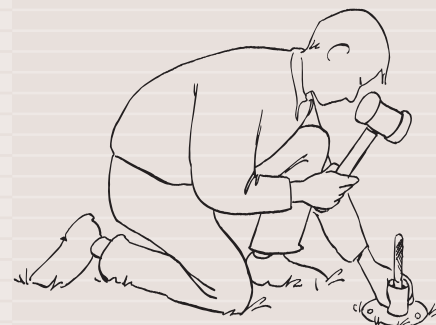


Hammering head with guide cylinder

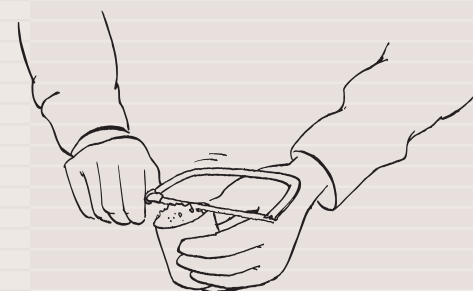


P1.31

**The soil sample ring is hammered into the soil from the surface using an impact absorbing hammer and guide cylinder.**



**The sample is trimmed using a small frame saw.**



Art.no.	Description	Qty. in set	Art.no.	Description	Qty. in set
<b>P1.31</b>	<b>Soil sample ring kits</b>		<b>**01.10.11.C</b>	Handle, short, 10 cm, with beating head, c.sc.	1
	Three types of sample ring kits are supplied for the collection of undisturbed soil samples in sample rings:		<b>**01.02.02.07.C</b>	Edelman auger, bottom part, comb.type, c.sc., Ø 7 cm	1
	- Sample ring kits with the postfix SA for sampling in soft soils above the groundwater level		<b>**01.04.00.07.C</b>	Riverside auger, bottom part, c.sc., Ø 7 cm	1
	- Sample ring kits with the postfix SC for sampling in virtually all soils (also under the groundwater level)		<b>**07.03.02.53.C</b>	Closed ring holder, bottom part, for rings Ø 53x50 mm, incl. spare parts, c.sc.	1
	- Sample ring kit with the postfix SE for sampling in very hard soils (also under the groundwater level)		<b>**07.03.02.53</b>	Spare cutting shoe for closed ring holder, Ø 53 mm	1
			<b>**07.05.01.53</b>	Hammering head for rings, Ø 53x50 mm	1
			<b>**07.05.02.53</b>	Guide cylinder for rings, Ø 53x50 mm	1
			<b>**04.05.05</b>	Steel hammer with nylon heads, Ø 70 mm, 2 kg, impact absorbing design	1
			<b>**01.10.13.C</b>	Extension rod, 50 cm, c.sc.	4
<b>07.53.SA</b>	<b>Sample ring kit model A, standard set to a depth of 2 m. For soil sample rings Ø 53 mm</b>		<b>**07.01.53.NN</b>	Aluminium case with 24 soil sample rings, Ø 53x50 mm, height 51 mm, contents 100 cc max. deviation less than 0.5 %, incl. 48 plastic covers Ø 53 mm (rings numbered 1 to 24)	1
<b>**01.10.17.B</b>	Handle, normal, 60 cm, with all synthetic, detachable grip (incl. coupling sleeve), bay.	1	<b>**04.05.01.20</b>	Bent spatula, breadth 20 mm	1
<b>**01.02.02.07.B</b>	Edelman auger, bottom part, comb.type, bay., Ø 7 cm	1	<b>**99.50.22</b>	Spanner 20x22 mm	2
<b>**01.04.00.07.B</b>	Riverside auger, bottom part, bay., Ø 7 cm	1	<b>**07.00.01</b>	Cylindrical brush, Ø 65 mm	1
<b>**07.03.01.53.B</b>	Open ring holder, bottom part, for rings Ø 53x50 mm, bay	1	<b>**01.11.04</b>	Field data registration set	1
<b>**01.10.06.B</b>	Extension rod, 50 cm, (incl. 2 coupling sleeve), bay.	2	<b>**07.00.00</b>	Carrying bag for field equipment with handgrip, Ø 20x77 cm	1
<b>**07.01.53.NN</b>	Aluminium case with 24 soil sample rings, Ø 53x50 mm height 51 mm, contents 100 cc max. deviation less than 0.5 %, incl. 48 plastic covers Ø 53 mm (rings numbered 1 to 24)	1	<b>07.60.SC</b>	<b>Sample ring kit model C, standard set to a depth of 2 m. For soil sample rings Ø 60 mm</b>	
<b>**07.00.01</b>	Cylindrical brush, Ø 65 mm	1	<b>**01.10.11.C</b>	Handle, short, 10 cm, with beating head, c.sc.	1
<b>**07.00.00</b>	Carrying bag for field equipment with handgrip, Ø 20x77 cm	1	<b>**01.02.02.08.C</b>	Edelman auger, bottom part, comb.type, c.sc., Ø 8 cm	1
<b>07.60.SA</b>	<b>Sample ring kit model A, standard set to a depth of 2 m. For soil sample rings Ø 60 mm</b>		<b>**01.04.00.08.C</b>	Riverside auger, bottom part, c.sc., Ø 8 cm	1
<b>**01.10.17.B</b>	Handle, normal, 60 cm, with all synthetic, detachable grip (incl. coupling sleeve), bay.	1	<b>**07.03.02.60C</b>	Closed ring holder, bottom part, for rings Ø 60x56 mm, incl. spare parts, c.sc.	1
<b>**01.02.02.08.B</b>	Edelman auger, bottom part, comb.type, bay., Ø 8 cm	1	<b>**07.03.02.60</b>	Spare cutting shoe for closed ring holder, Ø 60 mm	1
<b>**01.04.00.08.B</b>	Riverside auger, bottom part, bay., Ø 8 cm	1	<b>**07.05.01.60</b>	Hammering head for rings, Ø 60x56 mm	1
<b>**07.03.01.60.B</b>	Open ring holder, bottom part, for rings Ø 60x56 mm, bay.	1	<b>**07.05.02.60</b>	Guide cylinder for rings Ø 60x56 mm	1
<b>**01.10.06.B</b>	Extension rod, 50 cm, (incl. coupling sleeve), bay.	2	<b>**04.05.05</b>	Steel hammer with nylon heads, Ø 70 mm, 2 kg, impact absorbing design	1
<b>**07.01.60.NN</b>	Aluminium case with 24 soil sample rings, Ø 60x56 mm, height 40.5 mm, contents 100 cc, max. volume deviation 0.5 %, incl. 48 plastic covers Ø 60 mm (rings numbered 1 to 24).	1	<b>**01.10.13.C</b>	Extension rod, 50 cm, c.sc.	4
<b>**07.00.01</b>	Cylindrical brush, Ø 65 mm	1	<b>**07.01.60.NN</b>	Aluminium case with 24 soil sample rings, Ø 60x56 mm, height 40.5 mm, contents 100 cc, max. volume deviation 0.5%, incl. 48 plastic covers Ø 60 mm (rings numbered 1 to 24)	
<b>**07.00.00</b>	Carrying bag for field equipment with handgrip, Ø 20x77 cm	1	<b>**04.05.01.20</b>	Bent spatula, breadth 20 mm	1
<b>07.53.SC</b>	<b>Sample ring kit model C, standard set to a depth of 2 m. For soil sample rings Ø 53 mm</b>		<b>**99.50.22</b>	Spanner 20x22 mm	2
			<b>**01.11.04</b>	Field data registration set	1
			<b>**07.00.01</b>	Cylindrical brush, Ø 65 mm	1
			<b>**07.00.00</b>	Carrying bag for field equipment with handgrip, Ø 20x77 cm	1
			<b>07.84.SC</b>	<b>Sample ring kit model C, standard set to a depth of 2 m. For soil sample rings Ø 84 mm</b>	



## PARTS LIST

Art.no.	Description	Qty. in set	Art.no.	Description	Qty. in set
**01.10.11.C	Handle, short, 10 cm, with 1 beating head, c.sc.	1		Ø 20x77 cm.	
**01.02.02.10.C	Edelman auger, bottom part, comb.type, c.sc., Ø 10 cm	1		<b>Soil sample rings</b>	
**01.04.00.10.C	Riverside auger, bottom part, c.sc., Ø 10 cm	1		<b>Soil sample rings are supplied in standard cases. The rings in the cases are provided with numbers 1 to 24 (NN), special numbers (SN), or without numbers (ZN).</b>	
**07.03.02.84.C	Closed ring holder, bottom part, for rings Ø 84x80 mm, incl. spare parts, c.sc.	1			
**07.03.02.84	Spare cutting shoe for closed ring holder, Ø 84 mm.	1			
**07050184	Hammering head for rings, Ø 84x80 mm	1	07.01.53.NN	Aluminium case with 24 soil sample rings, Ø 53x50 mm height 51 mm, contents 100 cc max. deviation less than 0.5 %, incl. 48 plastic covers Ø 53 mm (rings numbered 1 to 24)	
**07.05.02.84	Guide cylinder for rings, Ø 84x80 mm	1			
**04.05.05	Steel hammer with nylon heads, Ø 70 mm, 2 kg, impact absorbing design	1	07.01.53.SN	Aluminium case with 24 soil sample rings, Ø 53x50 mm, height 51 mm, contents 100 cc, max. deviation less than 0.5 %, incl. 48 plastic covers Ø 53 mm, rings with special numbering	
**01.10.13.C	Extension rod, 50 cm, c.sc.	4			
**07.01.84.NN	Aluminium case with 10 soil sample rings, Ø 84x80 mm, height 50 mm, contents 250 cc, max. volume deviation 3 %, incl. 20 plastic covers Ø 84 mm (rings numbered 1 to 10)	2	07.01.53.ZN	Aluminium case with 24 soil sample rings, Ø 53x50 mm, height 51 mm, contents 100 cc, max. deviation less than 0.5 %, incl. 48 plastic covers Ø 53 mm, rings not numbered	
**04.05.01.20	Bent spatula, breadth 20 mm	1			
**99.50.22	Spanner 20x22 mm	2			
**01.11.04	Field data registration set	1			
**07.00.01	Cylindrical brush, Ø 65 mm	1			
**07.00.00	Carrying bag for field equipment with handgrip, Ø 20x77 cm	1	07.01.60.NN	Aluminium case with 24 soil sample rings, Ø 60x56 mm, height 40.5 mm, contents 100 cc, max. volume deviation 0.5 %, incl. 48 plastic covers Ø 60 mm (rings numbered 1 to 24).	
<b>07.53.SE</b>	<b>Sample ring kit model E, with heavy duty sample ring holder for sampling in hard soils. Standard set for a depth of 2 m. For soil sample rings Ø 53 mm.</b>		07.01.60.SN	Aluminium case with 24 soil sample rings, Ø 60x56 mm, height 40.5 mm, contents 100 cc, max. volume deviation 0.5 %, incl. 48 plastic covers Ø 60 mm, rings with special numbering	
**01.10.11.C	Handle, short, 10 cm, with beating head, c.sc.	1			
**01.02.02.07.C	Edelman auger, bottom part, comb.type, c.sc., Ø 7 cm	1	07.01.60.ZN	Aluminium case with 24 soil sample rings, Ø 60x56 mm, height 40.5 mm, contents 100 cc, max. volume deviation 0.5 %, incl. 48 plastic covers Ø 60 mm, rings not numbered	
**01.04.00.07.C	Riverside auger, bottom part, c.sc., Ø 7 cm	1			
**07.03.03.53.C	Closed ring holder, heavy design, bottom part, for rings Ø 53x50 mm, incl. spare parts, c.sc.	1			
**07.03.03.53	Spare cutting shoe for closed ring holder, heavy design, Ø 53 mm	1	07.01.84.NN	Aluminium case with 10 soil sample rings, Ø 84x80 mm, height 50 mm, contents 250 cc, max. volume deviation 3 %, incl. 20 plastic covers Ø 84 mm (rings numbered 1 to 10)	
**07.05.01.53	Hammering head for rings, Ø 53x50 mm	1			
**07.05.02.53	Guide cylinder for rings, Ø 53x50 mm	1	07.01.84.SN	Aluminium case with 10 soil sample rings, Ø 84x80 mm, height 50 mm, contents 250 cc, max. volume deviation 3 %, incl. 20 plastic covers Ø 84 mm, rings with special numbering	
**04.05.05	Steel hammer with nylon heads, Ø 70 mm, 2 kg, impact absorbing design	1			
**01.10.13.C	Extension rod, 50 cm, c.sc.	4			
**07.01.53.NN	Aluminium case with 24 soil sample rings, Ø 53x50 mm height 51 mm, contents 100 cc max. deviation less than 0.5 %, incl. 48 plastic covers Ø 53 mm (rings numbered 1 to 24)	1	07.01.84.ZN	Aluminium case with 10 soil sample rings, Ø 84x80 mm, height 50 mm, contents 250 cc, max. volume deviation 3 %, incl. 20 plastic covers Ø 84 mm, rings not numbered	
**04.05.01.20	Bent spatula, breadth 20 mm	1			
**99.50.22	Spanner 20x22 mm	2			
**07.00.01	Cylindrical brush, Ø 65 mm	1		<b>Individual rings with covers and cases.</b>	
**01.11.04	Field data registration set	1			
**07.00.00	Carrying bag for field equipment with handgrip,	1	07.01.01.53	Stainless steel soil sample ring, Ø 53x50 mm, height	

# PARTS LIST



Art.no.	Description	Qty. in set	Art.no.	Description	Qty. in set
07.01.05.53	51 mm, contents 100 cc, max. volume deviation 0.5 %, not numbered Stainless steel soil sample ring, Ø 53x50 mm, height 51 mm, contents 100 cc, max. volume deviation 0.5 %, with special numbering		07.03.02.84	closed ring holder, Ø 60 mm Spare cutting shoe for closed ring holder, Ø 84 mm	
07.01.01.60	Stainless steel soil sample ring, Ø 60x56 mm, height 40.5 mm, contents 100 cc, according to DIN 19672 - Form Q1, max. volume deviation 0.5%, not numbered			<b>Handles and extension rods to be used with ring holders. (with B = bayonet connection and with C = conical threaded connection).</b>	
07.01.05.60	Stainless steel soil sample ring, Ø 60x56 mm, height 40.5 mm, contents 100 cc, according to DIN 19672 - Form Q1, with special numbering		01.10.01.B	Handle, normal, 60 cm, bay. (incl. coupling sleeve)	
07.01.05.60	Stainless steel soil sample ring, Ø 84x80 mm, height 50 mm, contents 250 cc, max. volume deviation 3%, not numbered		01.10.06.B	Extension rod, 50 cm, (incl. coupling sleeve), bay.	
07.01.05.84	Stainless steel soil sample ring, Ø 84x80 mm, height 50 mm, contents 250 cc, with special numbering		01.10.07.B	Extension rod, 100 cm (incl. coupling sleeve) bay.	
07.01.02.53	Cap, natural PE, Ø 53 mm		01.10.10.01.C	Handle, normal, 60 cm, c.sc.	
07.01.02.60	Cap, natural PE, Ø 60 mm		01.10.11.C	Handle, short, 10 cm, with beating head, c.sc.	
07.01.02.84	Cap, natural PE, Ø 84 mm		01.10.12.C	Extension rod, 100 cm, c.sc.	
07.01.03.53	Aluminium cover, Ø 54 mm		01.10.13.C	Extension rod, 50 cm, c.sc.	
07.01.03.60	Aluminium cover, Ø 61 mm			<b>Hammering head with guide cylinder</b>	
07.01.03.84	Aluminium cover, Ø 85 mm			<b>Depending on the Ø of sample ring you may choose the corresponding hammering head and belonging guide cylinder.</b>	
07.02.01	Aluminium case for 24 soil sample rings Ø 53 mm or 10 soil sample rings Ø 84 mm		07.05.01.53	Hammering head for rings, Ø 53x50 mm	
07.02.02	Aluminium case for 24 soil sample rings, Ø 60 mm		07.05.01.60	Hammering head for rings, Ø 60x56 mm	
	<b>Ring holders</b>		07.05.01.84	Hammering head for rings, Ø 84x80 mm	
	<b>Ring holders are supplied in two types viz. open and closed ring holders (with B = bayonet connection and with C = conical threaded connection).</b>		07.05.02.53	Guide cylinder for rings, Ø 53x50 mm	
07.03.01.53.B	Open ring holder, bottom part, for rings Ø 53x50 mm, bay		07.05.02.60	Guide cylinder for rings, Ø 60x56 mm	
07.03.01.60.B	Open ring holder, bottom part, for rings Ø 60x56 mm, bay.		07.05.02.84	Guide cylinder for rings, Ø 84x80 mm	
07.03.02.53.C	Closed ring holder, bottom part, for rings Ø 53x50 mm, incl. spare parts, c.sc.			<b>A very special sample ring kit is the Dutch core cutter method</b>	
07.03.03.53.C	Closed ring holder, heavy design, bottom part, for rings Ø 53 x 50 mm, incl. spare parts, c.sc.		<b>08.09</b>	<b>Core cutter method, according to Dutch RAW-standard 2000, test no. 4.4</b>	
07.03.02.60.C	Closed ring holder, bottom part, for rings Ø 60x56 mm, incl. spare parts, c.sc.		**08.09.01	Stainless steel sample ring, Ø 95.7x102 mm, height 81.5 mm, cutting edge according to RAW-2000/4.4 for non-cohesive material	3
07.03.02.84.C	Closed ring holder, bottom part, for rings Ø 84x80 mm, incl. spare parts, c.sc.		**08.09.11	Stainless steel sample ring, Ø 95.7x102 mm, height 81.5 mm, cutting edge according to RAW-2000/4.4 for clay and clayey light gravely sand	3
07.03.02.53	Spare cutting shoe for closed ring holder, Ø 53 mm		**08.09.02	Collar for sample ring	1
07.03.03.53	Spare cutting shoe for closed ring holder, heavy design, Ø 53 mm		**08.09.03	Guide cylinder for drop weight	1
07.03.02.60	Spare cutting shoe for		**08.09.04	Drop weight 6.0 kg	1
			**08.09.05	Frame for guide cylinder	1
			**08.09.09	Steel ruler (without graduation), with cutting edge	1
			**08.09.07	Flat stainless steel plate	2
			**08.09.08	Flat brush, length 35 cm	1