Document Title: Part #				
Description:		18059		
	Degassing with syringes application note		Release Date: 2024	
Rev	Description	Revision By	Date	
00	Original release NEW 21327	EMR	4.2024	

Print File Path:

http://publications.metergroup.com/Application%20Notes/18059 Degassing with syringes Web.pdf

Working File Path: SharePoint/Sites/Product Number Library/18000-18099/18059

Dimensions: 5.5" wide x 11" tall

Colors: CMYK/Full color 4/4

Printer Type: ELECTRONIC ONLY

Special Notes: Image below is for reference only (not to scale); File in Product Library



DEGASSING WITH SYRINGES APPLICATION NOTE

PURPOSE OF THIS APPLICATION NOTE

This application note covers:

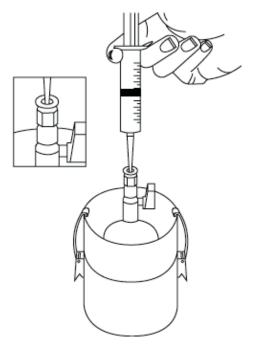
- · Degassing water with syringes
- · Degassing tensiometers with syringes
- · Degassing the HYPROP with adapter and syringes

The Refill Unit is recommended because the process is automated, fast, and reliable. Refer to the HYPROP user manual for using the Refill Unit. When a Refill Unit isn't available, syringes can be used to degas the water. This application note provides the steps for degassing with syringes when the Refill Unit isn't available.

NOTE: It is recommended to begin device preparations as soon as possible once soil samples are available due to the time needed for degassing water.

MATERIALS NEEDED

- · Droplet syringe
- · Reservoir syringe
- Vacuum syringe
- · Tensiometer shafts
- Refiling adapter
- HYPROP
- Tubing (size) 6 mm
- · Gloves or rubber caps for tensiometer shafts
- 2 O-rings
- · Computer with LABROS SoilView software



Syringe, refilling adapter, and HYPROP

▲ PRECAUTIONS

Avoid touching the ceramic tips of the tensiometer shafts.

Be sure that no water can enter the shaft from the open end. If water enters the shaft from the open end, air will be locked in the pores of the ceramic tip, preventing accurate readings.

TENSIOMETER SHAFTS

Before degassing water, place the ceramic tips of the tensiometer shafts in deionized water overnight (Figure 1).

The porous ceramic tip enables the degassed water in the tensiometer shafts and the water in the soil to connect. The measured matric potential (also called tension) is transduced by the water down to the pressure transducer's location in the sensor unit.

METER Group, Inc.

2365 NE Hopkins Court, Pullman, WA 99163 T+1.509.332.2756 F+1.509.332.5158 Einfo@metergroup.com W metergroup.com