## **CHAPTER 3**

## Small tensiometer

Small tensiometers have two different sizes of the porous cell: ø 10 mm for type KV02 for the smallest vessels (pots from approx. 8 cm), also in embankments or gutters;

and ø 15 mm for type KV2 for common pot sizes and also for loose and granulated substrates, as well as medium-sized containers or shallow-rooted bedded plants (LM). For the smaller types, the maximum suction power is limited to max. 200 - 300 hPa, due to their design and the corresponding smaller filling volume. The tensiometers are inserted to depths of 40 - 70 mm or 50 - 80 mm.

Connections for analogue manometers, switching sensors and E-sensors, also with integrated T-piece. The Premium plug-in tensiometers are also available in small sizes with lengths of 16 and 19 cm, with a porous cell diameter of 20 mm and a tube diameter of 25 mm. They have the advantage of a larger filling quantity, but there must be sufficient space at the measurement location for the larger porous cell. Small plug-in tensiometers are often used as tensiostats with switching sensors for irrigation control. They are also often combined with electronic sensors, for controlling or merely for recording moisture profiles. Using T-pieces, it is possible to add manometers (e.g. to monitor the switching points). The water column is usually not calculated using the small tensiometers.

## **TECHNICAL SPECIFICATIONS:**

Tube diameter:	KV02: ø 15 mm
	KV2: ø 18 mm
	LM: ø 25 mm
Porous cell:	Type KV02 approx. ø 10mm x 30mm,
	cylindrical
Type K	V2 approx. ø 15mm x 40mm, cylindrical
Type L	M approx. ø 20mm x 60mm, cylindrical.
Threaded conne	ction: GL14 for analogue manometers
	IT: one each for GL14 and BL,
	as integrated T-piece 45°
IT45: f	or two GL14s as integrated T-piece 45°
Overall length:	Type KV02-x 12cm
	Type KV2-x 15cm
	Type LM-x 16 or 19cm
Viewing window	yes, approx. 3 cm

