



General

The quantity of precipitation falling on a surface is characterized by the height - measured in mm - in which the precipitation would cover the ground if no water had penetrated into the ground, run off or evaporated.

For the ascertainment of the precipitation, the rain falling on apart of the respective surface will be collected and measured at certain times of observation. The measuring result is valid as average value for the whole area of observation.

As the quantity of precipitation may locally differ considerably, the accuracy of measurement depends on one hand on the proportion of the measuring surface to the entire surface of observation, and on the other hand on the choice of a suitable measuring place. Due to economical reasons the proportion of the measuring surface to the surface of observation is always extraordinarily small, so that special attention has to be paid to the choice of the measuring site for the precipitation meters.

Choice of the installation place

Precipitation meters have to be set up on a free place. Houses, trees and other objects should be as far from the place of observation as they are tall. The growth of trees and bushes has to be taken into consideration, too. The setting up on roofs or in the entirely free area - especially on unprotected soil elevations - is not advisable, since the measurements might be unfavourably influenced by the wind so that representative measuring results will rarely be obtained for a large area of observation. The measuring or receiving surface respectively should be 1 m above the ground.

Installation

For the fastening of the rain gauge, Diem type, the supplied bracket can be used, which has to be screwed on a square, bar post with a cross section of approx. 10 x 10 cm.

Function

The rain gauge (1503), Diem type, has a receiving surface of 100 cm². The conical measuring cylinder is combined with the collecting funnel to one structural unit. The measuring cylinder is divided in 1/1 mm within the range from 5 to 40 mm of precipitation and in 1/2 mm within the range from 0 to 5 mm of precipitation thus increasing the reading accuracy in case of smaller precipitations. The collected quantity of precipitation will be measured at the respective time of observation and then poured away. During the reading, the eyes have to be in the same height as the water level in order to avoid parallax errors.



Solid precipitations cannot be ascertained by the rain gauge, Diem type. When frost begins, the instrument has to be removed from the bracket and should be stored in a protected room.

Technical data

Id-No.	00.15030.000 000
Meas. element	Collecting funnel with measuring scale
Meas. ranges	Collecting funnel 400 cm ³ • Precipitation quantity 40 mm
Collecting surface	100 cm ²
Range of application	Temperatures 0...+60°C
Resolution/ Scale	0.5 mm/ 0...5 mm • 1 mm/ 5...40 mm
Collecting funnel	Polystyrene
Holder	Stainless steel
Dimensions	H 365 mm · collecting funnel Ø 113 mm
Weight	Approx. 0.15 kg • holder approx. 0.3 kg

Accessories:

33.15030.001 000 (1503-1) Spare collecting funnel
Weight approx. 0.15 kg



Quality System certified by DQS according to
DIN EN ISO 9001:2000 Reg. No. 003748 QM

Subject to change without notice.

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