ROCKMETER RM / RMT

Application

Single or multiple-rod rockmeters are used for measuring displacements and deformations in abutments of dams and bridges, in terrain and rock slopes, tunnels and in excavations etc.

Description

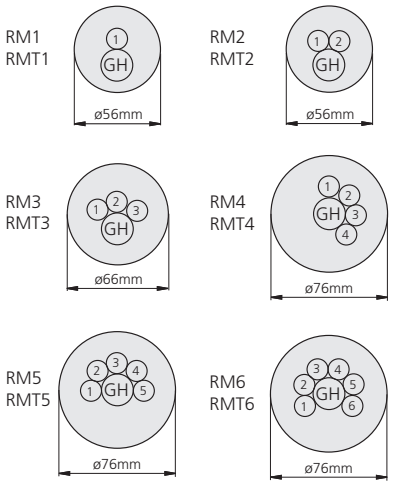
With rockmeters displacements along a borehole axis can be determined. A rod assembly consists of several single rods which are screwed together and installed in a protective plastic tube. The rod tips (anchors) are anchored at different depths of the borehole. The slim rockmeter head is grouted in the borehole. The anchors at the end of the rods and the rockmeter head are the fixpoints of the test sections. The displacements between these fixpoints are measured with a setdeflectometer (manually; type RM) or with applied electric displacement transducers (automatically; type RMT).

Rockmeters may be installed regardless of their position at any inclination and with rod lengths up to 80 m. Rockmeters can be equipped with 1 to 6 rods in the same borehole (more than 6 rods on request). The rods may have different lengths, according to the application. With a multiple-rod rockmeter the depth of displacements can be located. For instance this is important when determining the installation depth of prestressed anchors.

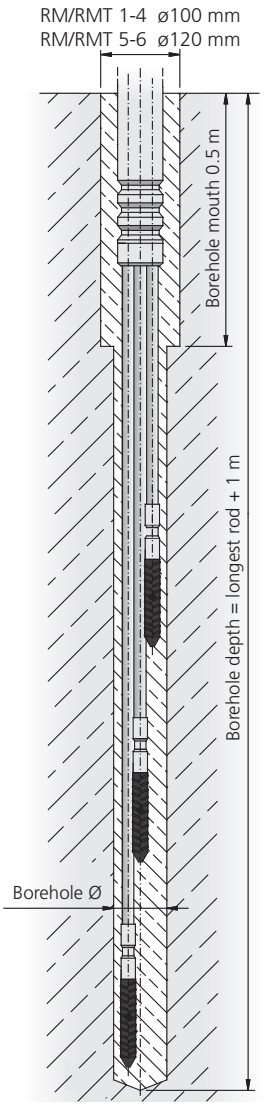
Expected temperature-induced changes in length can be compensated by the use of thermometers (HUGGENBERGER Telethermeter).

RMT4; 4 rods with electrical transducers for automatic measurement

RM3: 3 rods with Setdeflectometer for manual measurement



Borehole diameters



Technical Data

Type	RM	RMT	RMT
Installation	regardless of position, may be installed at any inclination		
Measuring head	RM1: ø 30 mm / RM2/3/4: ø 60 mm / RM5/6: ø 80 mm		
Measuring points	1–6 anchors per borehole		
Length of rods	according to application		
Measuring range	±25 mm, adjustable ±25 mm		
Reading	Setdeflectometer ERDM	Depth gauge RDT for mechanical check	Indipoc MC7 Tensologger TL
Resolution	0.01 mm	0.03 mm	0.01 mm
Electr. transducer	—	—	TTP50/TTP50F
Borehole Ø [1]	RM/RMT 1/2: 56 mm / RM/RMT 3: 66 mm / RM/RMT 4/5/6: 76 mm		
Borehole depth [2]	max. rod length + 1 m		

[1] To a depth of 0.5 m the borehole mouth must be enlarged to ø 100/120 mm. [2] The borehole must be at least 1 m deeper than the longest rod.