ISO 18674-5:2019-10 (E)

Ge otechnical investigation and testing - Geotechnical monitoring by field instrume ntation - Part 5: Stress change measurements by total pressure cells (TPC)

Contents

Page

Foreword iv

1 Scope 1

2 Normative references 1

3 Terms and definitions 1

4 Symbols 5

5 Instruments 6
5.1 General 6
5.2 Deformation measuring method 7
5.3 Compensation measuring method 7
5.4 Stiffness of the pressure compartment 8
5.5 Shape of the pressure compartment 8
5.6 Accuracy 9

6 Installation and measuring procedure 10
6.1 Installation 10
6.1.1 Installation in the ground 10
6.1.2 Installation in fill 11
6.1.3 Installation in concrete/shotcrete 12
6.1.4 Installation in contact planes 13
6.2 Carrying out the measurement 14
6.2.1 Instrumentation check and calibration 14
6.2.2 Measurement 14

7 Data processing and evaluation 14

8 Reporting 14
8.1 Installation report 14
8.2 Monitoring report 14

Annex A (normative) Evaluation procedure 15

Annex B (informative) Geo-engineering applications 17

Annex C (informative) Measuring examples 18

Bibliography 27