GEOLOGICAL, GEOPHYSICAL, GEOTECHNICAL SERVICES AND INSTRUMENTS



## LATERAL LOAD TESTER

# LLT TYPE- M



### **GENERAL**

The LLT Type "M" is an in-situ tester to evaluate the mechanical characteristics of soft ground.

The LLT operates using inflatable rubber packers and mechanical properties are deduced from the relationship between applied stress and deformation. Three different diameter sondes (60,70,80 mm) are available to cover a wide range of borehole diameters. The water tank consists of four equi-dimensional cylinders enabling the user to select four different water volumes dependent on the sonde diameter. The whole system is packed in two carrying containers.

The LLT is able to evaluate the following foundation engineering static characteristics of the ground:

Modulus of subgrade reaction · · · · · · K value

Deformation modulus · · · · · · · · E value

Yield strength · · · · · · · · · · · · · · Py

### **■** GENERAL

Maximum loading

Pressure 25kg/cm<sup>2</sup>

(Maximum pressure to the probe is subject

to the diameter of the test hole.)

Measuring range(diameter) of borehole

 $60\text{mm}\,\Phi$  sonde 65mm to 120mm  $70\text{mm}\,\Phi$  sonde 75mm to 130mm  $80\text{mm}\,\Phi$  sonde 85mm to 140mm

### **■ SONDE**

Rubber membrane

Outer rubber NBR Rubber

Inner rubber Natural rubber(NR)

**Dimensions** 

 $60\text{mm}\,\Phi$  sonde 1010mm 7.8kg  $70\text{mm}\,\Phi$  sonde 1030mm 11.5kg  $80\text{mm}\,\Phi$  sonde 900mm 12.0kg

### **■ MEASURING UNIT**

Water tank 60mm(I.D.)65mm(O.D.)880mm(L)

4pcs

Capacity (Effective) 1.7 litre/piece

Standpipe 12mm(O.D.) 6mm(I.D.) 600mm(L)

Reinforced glass with protective

acrylic resin pipe.

Carrying container

995mm(L) 530mm(W) 200mm(H)

Approx. 40kg(packed condition)

### ACCESSORIES

Regulator valve

Input 150kg/cm²(max.)

Output 50kg/cm<sup>2</sup>(max.)

High pressure air hose 6mm(I. D.) 15mm(O.D.) 5mm(L)

Nylon tubing 6mm(O.D.) 4mm(I.D.) 100mm x 2

Length is optional according to survey condition (max.30m)

Carrying container The same size with that of measuring unit. approx. 40kg (packed condition)

### ■ OPTION

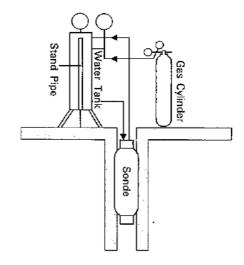
Gas cylinder for nitrogen gas

Inner pressure 150kg/cm<sup>2</sup>

Dimensions 140mm  $\Phi$  1050mm(H)

Weight 16kg

Nitrogen gas should be filled locally.



# EXAMPLE 2.0 2.0 Silty Clay N value = 1 Po=0.28kg/cr K=3.88kg/cr Py=0.74kg/cr E=23.2kg/cr Pl=1.50kg/cr 4.0 4.5 5.0 Raduis(cm)r



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Please note specifications are subject to change without notice for the improvement.



