

Description

VW Rock Bolt Stressmeter is to measure the stress that is transmitted to the rock bolt and verify propriety of the rock bolt (effective length, quantity and stress of rock bolt). It is designed to measure accurate stress of rock bolt that is reinforced and installed for strengthening the rock at the construction field such as tunnel, mining, hanger, cable tunnel, etc.



Feature

The adjusted to about 1,800Hz VW sensor is built in main body and rock bolt anchor can be installed easily by internal diameter $\varnothing 16.2$ and external diameter $\varnothing 27.2$ mm high carbon pipe steel in $\varnothing 38$ mm internal diameter bore hole.

Component

- * Rock bolt stress meter main body
- * Cable

Specification

Model	SJ-5600
Sensor type	VW Type Sensor
Measurement range	1,400 ~ 3,500Hz
Measurement frequency	Min 1,000 ~ Max 4,000 $\mu\epsilon$
Accuracy	0.385kN
Resolution	0.1 $\mu\epsilon$
Non-linearity	$\pm 0.5\%$ FSR
Thermal expansion coefficient	11×10^{-6} / $^{\circ}\text{C}$
Operation Temp.	-20°C ~ 50°C
Temp sensor working range	RTD : $-45 \sim 100^{\circ}\text{C}$ / Thermistor : $-30 \sim 80^{\circ}\text{C}$
Temp sensor accuracy	RTD : $\pm 0.7^{\circ}\text{C}$ / Thermistor : $\pm 1^{\circ}\text{C}$
Measurement point number	4 Points
Minimum hole diameter	over $\varnothing 38$ mm
Anchor nominal size	Internal diameter. $\varnothing 16.2$ / External dia. $\varnothing 27.2$ mm
Anchor cross section area	374.95 mm ²
VW gauge effective load	Approx. 15 ton.f
Anchor elastic coefficient/Yield point	2.1 x 10 ⁴ / dir 17 ton.f (Assume Max. elastic strain is 4,500 kg/cm ²)
Anchor material	High carbon piping steel (film coated)
Signal cable	$\varnothing 10$ mm, 0.235mm ² x 8C Shield PVC SYS cable 3m

※ The product spec is subject to change without prior notice in order to enhance the product's quality.



A	Cable
B	Connector
C	Head
D	Housing
E	Sensor
F	End cover

Dimension	Length	4meter
	Guage Length	1,000mm
	Housing Dia.	33mm
	Pipe Dia.	27mm
	Weight	9.5kg

