BF-CT

Stress Measurement 300 MPaWith Temperature Measuring Function

Reinforcing-bar Stress Transducer



For stress measurement of reinforcing bar

- For long-term stable measurement, the transducer proper features a special structure with inert gas filled in.
- ●The self-temperature-compensated strain gage used for the transducer enables measurement of the temperature stress of the reinforcing bar.

The BF-CT series stress transducers are designed for stress measurement by welding both ends to a reinforcing bar in the field. They are available in various models for selection according to diameters of the reinforcing bars. Each model provides a temperature measuring function to enable simultaneous measurement of stress and temperature.

Specifications

Performance

•Stress Measurement				
Rated Capacity	Rated Capacity 300 MPa (1 Mpa=1 N/mm²)			
Nonlinearity Within ±1% RO				
Hysteresis	Within ±1.5% RO			
Rated Output	1.85 mV/V or more			
●Temperature Measurement				
Rated Capacity -30 to 70°C				
Measurement Error	±0.5°C (-30 to 70°C)			
(See page 7-32 for Small-sized Temperature Transducer BTS-100AT.)				

Environmental Characteristics

Safe Temperature	-30 to 80°C
Compensated Temperature	-20 to 70°C
Temperature Effect on Zero	Within ±0.05% RO/°C
Temperature Effect on Output	Within ±0.05%/°C

Electrical Characteristics

Safe Excitation	10 V AC or DC			
Recommended Excitation	2 to 10 V AC or DC 350 Ω ±2% at 0°C			
Input Resistance				
Output Resistance	450 Ω ±1.6% at 0°C			
Cable 4-conductor (0.5 mm²) chloroprene shielded cable,				
8 mm diameter by 1 m long, bared at the tip				

Mechanical Properties

Safe Overloads	110%
Nominal Diameter (Deformed Bar)	See table below.
Weight	See table below.

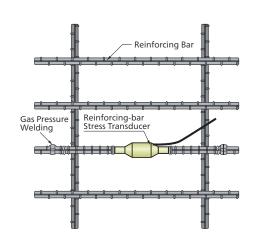
Other

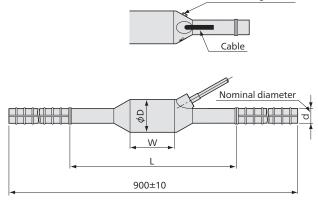
Applicable Reinforcing Bar	SD345 (Formerly, SD35)
Applicable Relificiting bal	3D343 (FULLETTY, 3D33)

Models	d*	φD	w	L	Weight (Approx.)
BF-10CT	D10	43	55	(190)	900 g
BF-13CT	D13				1.3 kg
BF-16CT	D16	49	56	(200)	1.8 kg
BF-19CT	D19				2.5 kg
BF-22CT	D22				3.2 kg
BF-25CT	D25	61	70	(220)	4.3 kg
BF-29CT	D29				5.3 kg
BF-32CT	D32				6.3 kg

Application Example

Dimensions





M4 hexagon nut*