



A Fluke Company

Furnace Tracker[®]

TB4900 series thermal barriers



The Datapaq[®] 4900 series thermal barriers combine experience with advanced design technology to give maximum protection to the data logger as the system passes through the furnace.

Using a balanced combination of microporous insulation and phase-change heat sink, the data logger is kept at a maximum temperature of 58°C (136°F) throughout the process, even though the external temperature may exceed 1000°C (1832°F).

FEATURES AND BENEFITS

- Operating temperature up to 1050°C (1922°F).
- 310 stainless steel exterior (including fasteners) provides the best resistance to oxidation at extreme temperatures.
- The Datapaq Floating Plate[®] design technology minimizes distortion – essential if furnace clearance is limited.
- Sturdy, 310 stainless steel handles securely welded to base and lid ensures secure handling when hot.
- Health and safety preferred 'Mullite Textile' barrier lining eliminates the need for ceramic fiber.
- User replaceable 'Mullite Textile' wear strips protect the thermocouple exits and minimize maintenance costs.
- Rounded edges on barrier lid and base alleviate the effects of thermal stress.
- One way lid and base alignment avoids thermal damage through lid misplacement.

APPLICATIONS

For all furnace applications including:

Glass Industry

- TV glass annealing
- TV tube frit sealing
- TV tube shadow mask annealing and blackening
- Headlamp and spot lamp bulb annealing

Aluminum Industry

- Log homogenization
- Billet re-heat prior to extrusion
- Vacuum brazing, 'Nocolok' brazing
- Plate solution treatment

Steel Industry

- Lamination annealing
- Plate annealing
- Sub-critical annealing of pipe and tubes
- General heat treatment
- Furnace surveying
- Coil and leaf spring tempering

Foundries

- Homogenizing ductile iron pipes
- Heat treatment of industrial castings

TECHNICAL SPECIFICATIONS

Thermal Barrier	Height	Width	Length	Length inc. handles	Weight
TB4915	104 mm (4.1 in)	247 mm (9.7 in)	409 mm (16.1 in)	529 mm (20.8 in)	9.5 kg (21 lb)
TB4905	129 mm (5.1 in)	247 mm (9.7 in)	409 mm (16.1 in)	529 mm (20.8 in)	13.8 kg (30 lb)
TB4956	154 mm (6.1 in)	275 mm (10.8 in)	409 mm (16.1 in)	529 mm (20.8 in)	15.5 kg (34.2 lb)
TB4912	174 mm (6.8 in)	296 mm (11.6 in)	411 mm (16.2 in)	531 mm (20.9 in)	21 kg (46.3 lb)
TB4938	217 mm (8.5 in)	291 mm (11.4 in)	402 mm (15.8 in)	522 mm (20.5 in)	26 kg (57.3 lb)
TB4926	254 mm (10 in)	358 mm (14.1 in)	443 mm (17.4 in)	563 mm (22.2 in)	32 kg (70.6 lb)
TB4933	304 mm (12 in)	406 mm (16 in)	493 mm (19.4 in)	613 mm (24.1 in)	44 kg (97 lb)

THERMAL DURATION AT AVERAGE FURNACE TEMPERATURE

Thermal Barrier	200°C (392°F)	400°C (752°F)	600°C (1112°F)	800°C (1472°F)	1000°C (1832°F)
TB4915	3 hrs 20 mins	1 hrs 50 mins	1 hrs 10 mins	50 mins	40 mins
TB4905	6 hrs	2 hrs	1 hrs 15 mins	1 hrs	50 mins
TB4956	8 hrs	4 hrs 15 mins	2 hrs 45 mins	2 hrs	1 hrs 15 mins
TB4912	14 hrs 30 mins	6 hrs 30 mins	4 hrs	2 hrs 5 mins	1 hrs 45 mins
TB4938	18 hrs	9 hrs	5 hrs 30 mins	3 hrs 45 mins	2 hrs 30 mins
TB4926	24 hrs	12 hrs	8 hrs 30 mins	6 hrs	4 hrs 30 mins
TB4933	27 hrs	18 hrs	10 hrs 30 mins	8 hrs 30 mins	7 hrs 30 mins

The Worldwide Leader in Temperature Profiling



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