

Zu vermieten:

Laser TRACER-G1 Etalon Technische Spezifikationen



SPEZIFIKATION

| Maße und Gewicht | |
|--|---------------------------------------|
| Gewicht LaserTRACER-NG | ca. 12 kg |
| Gewicht Elektronikeinheit | ca. 10 kg |
| Höhe LaserTRACER-NG | 200 mm |
| Höhe Referenzkugel über Tischoberfläche | 165 mm |
| Laserschutzklasse | 2 M |
| Arbeitsbereich | |
| Winkelbereich Nickachse | - 18° bis 85° |
| Winkelbereich Drehachse | ±200° |
| Messbereich | 0,2 m - 15 m |
| Winkelbereich Reflektor (Katzenauge) | 120° bzw. 160° |
| Umgebungstemperatur für angegebene | 15°C – 35°C |
| Dynamik | |
| Maximal zulässige Beschleunigung des | 3 m / s ² |
| Maximal zulässige Geschwindigkeit des | 20 m / min |
| Genauigkeit | |
| Frequenzstabilität Laser 24 h | 2 · 10-8 |
| Stabilität der Referenzkugel bei ΔT = ±1 K | ± 0,1 μm |
| Auflösung Interferometer | 0,001 μm |
| Räumliche Versatzmessung | $U_{(k=2)} = 0.2 \mu m + 0.3 \mu m/m$ |
| Kalibrierintervall (Empfehlung) | |
| Umweltsensoren | Alle 2 Jahre |
| Laserquelle | Alle 6 Jahre |
| Stromversorgung | |
| Eingangsleistung | 50 W – 100 W |

SPECIFICATION

| Weights and dimensions | |
|---|--|
| LaserTRACER-NG weight | approx. 12 kg |
| Controller weight | approx. 10 kg |
| LaserTRACER-NG height | 200 mm |
| Height of reference sphere above machine | 165 mm |
| Laser class | 2 M |
| Operating range | |
| Angular range elevation axis | - 18° bis 85° |
| Angular range azimuth axis | ±200° |
| Measuring range | 0,2 m - 15 m |
| Angular range reflector (cateye) | 120° respectively 160° |
| Environmental temperature for accuracy | 15°C – 35°C |
| Dynamics | |
| Maximal permissible acceleration of reflector | 3 m/s^2 |
| Marrianal manuscipalible valuation to the maffector | |
| Maximal permissible velocity of the reflector | 20 m / min |
| Accuracy | 20 m / min |
| . , | 20 m / min 2 · 10 ⁻⁸ |
| Accuracy | |
| Accuracy Frequency stability laser 24 h | 2 · 10-8 |
| Accuracy Frequency stability laser 24 h Stability of the reference sphere at $\Delta T = \pm 1 \text{ K}$ | 2 · 10·8 ± 0,1 μm |
| Accuracy Frequency stability laser 24 h Stability of the reference sphere at $\Delta T = \pm 1 \text{ K}$ Resolution interferometer | 2 · 10 ⁻⁸ ± 0,1 μm 0,001 μm |
| Accuracy Frequency stability laser 24 h Stability of the reference sphere at $\Delta T = \pm 1 \text{ K}$ Resolution interferometer Spatial displacement measurement | 2 · 10 ⁻⁸ ± 0,1 μm 0,001 μm |
| Accuracy Frequency stability laser 24 h Stability of the reference sphere at ΔT = ±1 K Resolution interferometer Spatial displacement measurement Calibration interval (recommendation) | $2 \cdot 10^{-8}$ $\pm 0.1 \mu\text{m}$ $0.001 \mu\text{m}$ $U_{(k=2)} = 0.2 \mu\text{m} + 0.3 \mu\text{m/m}$ |
| Accuracy Frequency stability laser 24 h Stability of the reference sphere at ΔT = ±1 K Resolution interferometer Spatial displacement measurement Calibration interval (recommendation) Environmental sensors | $2 \cdot 10^{-8}$ $\pm 0.1 \mu\text{m}$ $0.001 \mu\text{m}$ $U_{(k=2)} = 0.2 \mu\text{m} + 0.3 \mu\text{m/m}$ 2 Years |
| Accuracy Frequency stability laser 24 h Stability of the reference sphere at ΔT = ±1 K Resolution interferometer Spatial displacement measurement Calibration interval (recommendation) Enviromental sensors Laser source | $2 \cdot 10^{-8}$ $\pm 0.1 \mu\text{m}$ $0.001 \mu\text{m}$ $U_{(k=2)} = 0.2 \mu\text{m} + 0.3 \mu\text{m/m}$ 2 Years |

