

Stabilized HeNe Laser

SL 03 mini Series

Technical Data	SL 03 mini
Wavelength	632.8 nm
Output power	> 0.7 mW
Amplitude noise (30 Hz - 10 MHz)	0.02 %
Beam diameter (TEM ₀₀)	0.49 mm
Beam divergence (TEM ₀₀)	< 2.0 mrad
Beam polarization linearly polarized longitudinal mode	
Warm-up time to achieve stable operation	< 15 min
Relative frequency stability over after 40 min warm-up	1 min / 1 h / 24 h $\pm 1 \cdot 10^{-9} / \pm 2 \cdot 10^{-9} / \pm 5 \cdot 10^{-9}$
Absolutely frequency stability after 40 min warm-up	1 min / 1 h / 24 h ca. ± 0.5 MHz / ± 1 MHz / ± 2.5 MHz
Max. thermal frequency drift	< 2 MHz/K
Max. tolerated optical feedback	< $1 \cdot 10^{-5}$
Operating temperature range	+15...+30 °C
Storage temperature range	- 20 ... + 50
Typical life time	25000 h
Dimensions of laser head (Ø x L):	Ø 32 mm x 175 mm
Power consumption in stabilized condition	< 20 W
Power supply	
Line voltage / frequency	AC 100 ... 240 V / 47 ... 63 Hz
Dimensions electronic unit [W x H x D]	172 mm x 60 mm x 230 mm **
OEM Power supply	
Line voltage / frequency	12 V @ 2.5 A
Dimensions OEM electronic unit [W x H x D]	90 mm x 90 mm **
Length of cable between laser head and electronic unit m 1 (optionally up to 2)	
Mass of laser head incl. cable / electronic unit	900 / 1,600 g
Laser safety class according to EN 60825-1 / ANSI Z136.1 (CDRH)	3R / IIIa

** under revision

08/2021 · Subject to change.