

MICOS

MOTION CONTROL & OPTICS **USA**

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MICOS USA • 15375 BARRANCA PARKWAY • STE G101 • IRVINE • CA 92618 • PHONE 949 480 0538 • FAX 949 480 0538

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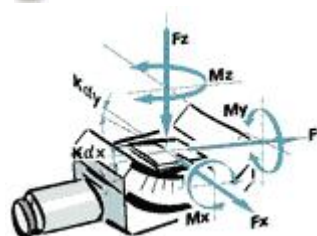
◀ 2.170 ▶ **Goniometer WT-90**

Positioners



Key features

- Repeatability 0.00077121°
- Angular scale feedback
- Tachometer combination
- Hardened worm and gear drive
- Precise, smooth continuous 90° motion
- Up to 30°/sec
- Single-row ball bearings
- Special, tempered Aluminium
- Load up to 12 kg
- Module combination



FACTS

Load Characteristics	Fx (N)	Fz (N)	Mx (Nm)	Mz (Nm)	ka (μrad/Nm)
DC-B-031	50	120	2.5	12	25
2Phase-033	50	120	2.5	12	25

DESCRIPTION

The **Goniometer Stages WT-90** and WT-120 are designed for all tasks where conventional rotation stages cannot be employed due to limited space conditions. Typical applications are measuring tasks in the field of laser- and radio-technology. The Goniometer Stages WT-90 and

WT-120 are well-suited to each other. Orthogonally mounted they have a common spacial center. WT-90 is equipped with a ground wire guiding. The ground and hardened screw worm-gear wheel combination produces a very quiet smooth move. Directly driven by DC-, 2-phase step motors high travel speed and resolution can be achieved. WT-90 Stages can be equipped with optical angular system. Resolutions up to 0.0003856 are standard offered. The Goniometer WT-90 is standardly equipped with two limit switches.



Technical data

Rotation Range (°)	90
Worm gear reduction	360:1
Accuracy (°)	+/- 0.025 ... 0.05
Repeatability (°)	+/- 0.0005
Reversal Error (°)	0.003856 ... 0.02
Velocity Range (°/sec)	0.001 ... 30
Wobble (µrad)	125

Speed max. (°/sec)	
<u>DC-B-031</u>	30
<u>2Phase-033</u>	15

Resolution Open-Loop (°)	
<u>2Phase-033</u>	0.001 (SMC) 0.005 (FS)

Resolution Closed-Loop (°)	
<u>RE-010</u> , Rotary encoder	0.0005
<u>AE-060</u> , Angular scale	0.0003856

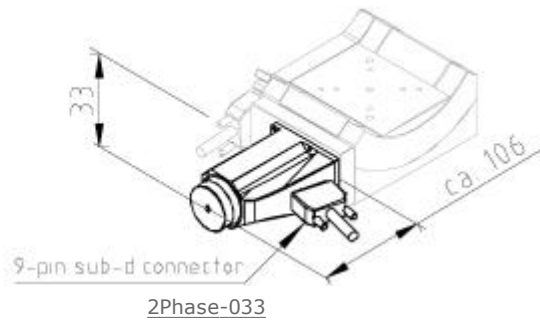
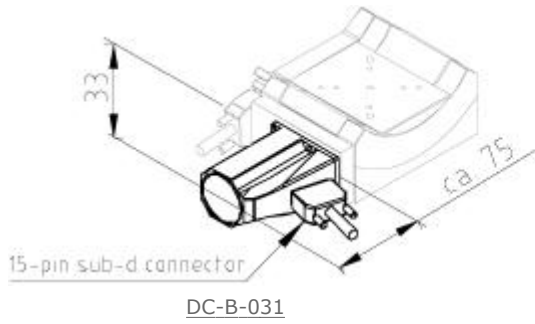
Current (Amps) / Voltage (Volts)	
<u>DC-B-031</u>	2 24
<u>2Phase-033</u>	1.2 -

Material	Special Aluminium, black anodized
Weight (kg)	2.8

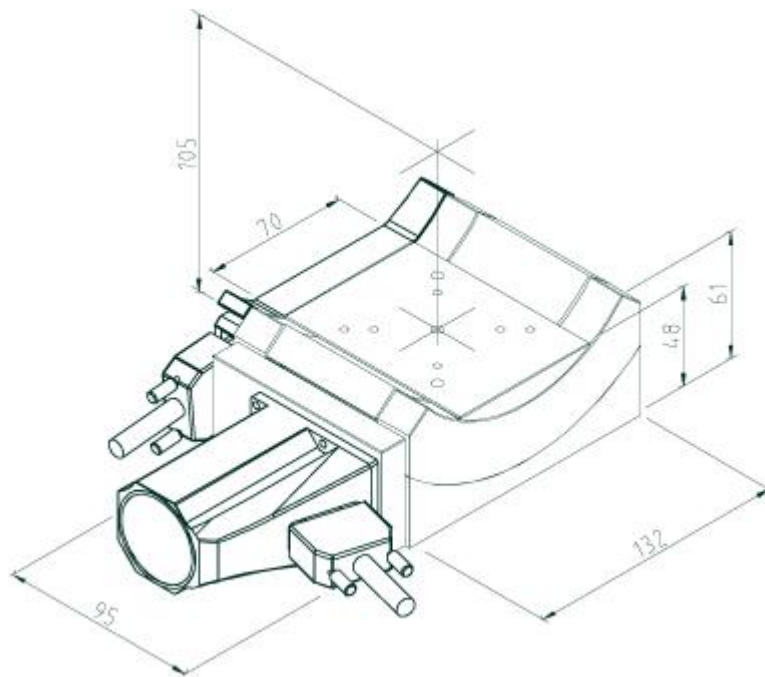
Note: (SMC): Micro-Step Mode, (FS): Full-Step 2Phase

More info: Detailed information, concerning motor and connectors, see: Appendix

WT-90 Motors



WT-90 Base



Rotation range
90°

[Download PDF](#)

WT-90 Ordering information

DC-B-031	1
2Phase-033	2



without AE-060
 AE-060, Angular
 steel scale

0
 1

6550-9-	0	
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Founded in 1990, MICOS specializes in the development, manufacturing and marketing of ultra-high precision positioning components and systems for research and industry. We are experts in vacuum, ultra-high vacuum, clean room, and extreme climate environments down to 77 Kelvin. ▶▶

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