

MICOS

MOTION CONTROL & OPTICS **USA**

[Terms](#) | [Sitemap](#) | [About us](#) | [Contact](#) | [Catalog](#) | [Shows](#) | [News](#) | [Offices](#) | [Partners](#) | [Press Center](#) | [Support](#) | [Team](#) | [Home](#)

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

Page

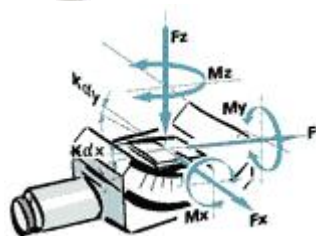
◀ 2.160 ▶ **Goniometer WT-120**

Positioners




Key features

- ▣ Repeatability 0.0004°
- ▣ Angular scale feedback
- ▣ Tachometer combination
- ▣ Hardened worm and gear drive
- ▣ Precise, smooth continuous 90° motion
- ▣ Speed up to 60°/sec
- ▣ Single-row ball bearings
- ▣ Special, tempered Aluminium
- ▣ Load up to 20 kg
- ▣ Module combination



FACTS

Load Characteristics	Fx (N)	Fz (N)	Mx (Nm)	Mz (Nm)	ka (μrad/Nm)
DC-B-041	90	200	8	25	15
2Phase-061 	90	200	8	25	15

DESCRIPTION

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

120 and WT-90 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-120 stages can be equipped with optical angular system. Resolutions up to 0.0002174 are standard offered. The Goniometer WT-120 is standard equipped with two limit switches.



Technical data

Rotation Range (°)	90
Worm gear reduction	180:1
Accuracy (°)	+/- 0.01 ... 0.05
Repeatability (°)	+/- 0.0002174 ... 0.008
Reversal Error (°)	+/- 0.0002174 ... 0.02
Velocity Range (°/sec)	0.001 ... 60
Wobble (µrad)	125

Speed max. (°/sec)

<u>DC-B-041</u>	60
<u>2Phase-061</u>	20

Resolution Open-Loop (°)

<u>2Phase-061</u>	0.001 (SMC) 0.01 (FS)
-------------------	-------------------------

Resolution Closed-Loop (°)

<u>RE-020</u> , Rotary encoder feedback	0.001
<u>AE-060</u> , Angular scale	0.00008696

Current (Amps) / Voltage (Volts)

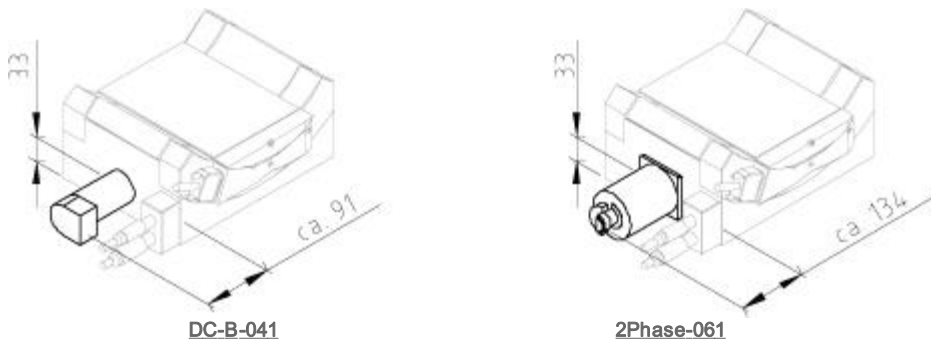
<u>DC-B-041</u>	3.8 24
<u>2Phase-061</u>	2.8 -

Material	Special Aluminium, black anodized
Weight (kg)	11.5

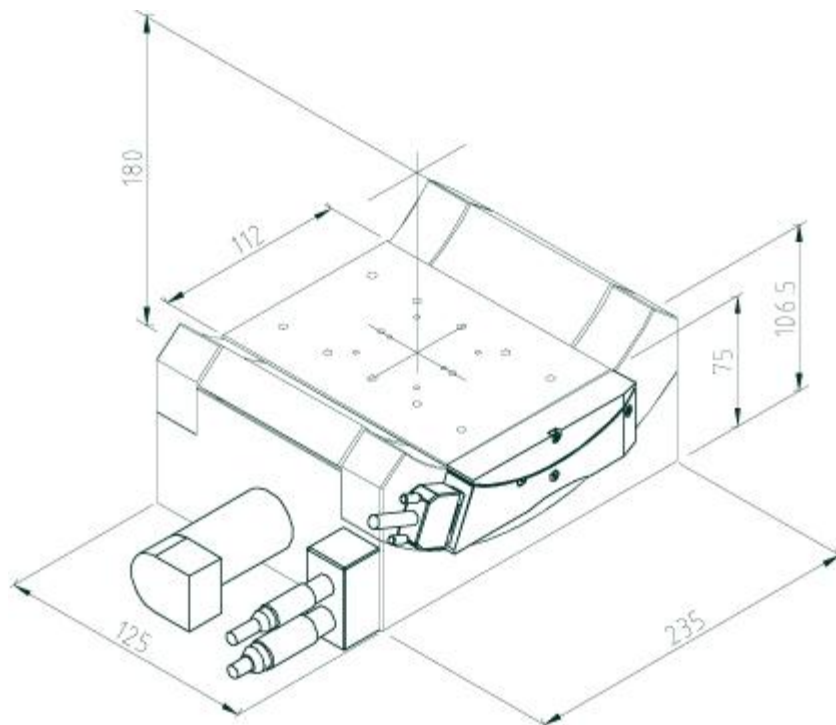
Note: (SMC): Micro-Step Mode, (FS): Full-Step 2Phase

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

WT-120 Motors



WT-120 Base

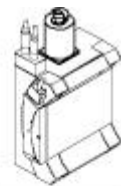


Rotation range
90°

[Download PDF](#)

WT-120 Ordering information

DC-B-041	1
2Phase-061	2



DC-B-041

2Phase-061

AE-060



90°



without AE-060
AE-060, Angular scale

0
1

6560-9-

1

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.

[Terms](#) | [Sitemap](#) | [About us](#) | [Contact](#) | [Catalog](#) | [Shows](#) | [News](#) | [Offices](#) | [Partners](#) | [Press Center](#) | [Support](#) | [Team](#) | [Home](#)
MOTION CONTROL = [Systems](#) | [Positioners](#) | [MiniPositioners](#) | [DirectDrives](#) | [Controllers](#) | [ManPositioners](#) | [Accessories](#) | [Vacuum](#)
MAC PhotonX = [Moskito](#) | [Albatros](#) | [Campus](#)

Copyright 2006 © MICOS GmbH