

# MICOS

MOTION CONTROL & OPTICS **USA**

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◀ 5.018 ▶ SMC-series SMC pollux

Controllers



Pocket Desktop  
(Stand-alone-system)



Motor & Controller System

### Key features

- Single-axis Microstep-Controller System
- Stand-alone-system, or with integrated 2-Phase stepper motor
- High-Resolution-Microstep
- Up to 16 SMC pollux can be combined with only one RS232 interface
- DSP Controller Type
- Velocity-range 0.1  $\mu\text{m}/\text{sec}$  up to 40 mm/sec (depends on controller-type and pitch)
- Serial Interface RS-232 - 19200 Baud
- Venus-2 compatible string-based command-language
- Windows TM User-Interface
- LabVIEW VI's
- Absolute encoder in preparation
- 24 VDC power supply (external)
- Ready to Upgrad [Soft Key Code] Typ I upto II

### Technical data

|                    |  |
|--------------------|--|
| Axes               | 1 axis, 2-phase stepper motors   |
| Computer-Interface | RS-232 - 19200 Baud (fix)  |
| Supply Voltage     | 24 VDC   |
| Phase Currents     | $\leq 1.2$ A/phase   |
| Limit-Switches     | 2 per axis software configurable (npn)   |
| Velocity range     | $< 0.1 \mu\text{m}/\text{s}$ .. 13 rev/s (200 step motor) TYPE I - Ready to Upgrad [Soft Key Code] TYPE I upto TYPE II |
|                    | $< 0.1 \mu\text{m}/\text{s}$ .. 26 rev/s (200 step motor) TYPE II  |
|                    | $< 0.1 \mu\text{m}/\text{s}$ .. 45 rev/s (200 step motor) TYPE III   |
| Max. Resolution    | 300 000 positions/rev.   |

|                        |  |
|------------------------|--|
| Max. linear resolution | 1 nm   |
| Program & Parameter    | Flash-Memory                                     |
| Amplifier              | 24V, with short-circuit & temperature protection |
| Phase-current          | up to 1.2A                                       |

For the version with integrated 2-Phase stepper motor:

|              |   |
|--------------|---|
| Motor torque | 16 Ncm (Type I)                                       |
|              | 16 Ncm (Type II)                                      |
|              | 32 Ncm (Type III)                                     |
| Housing      | Pocket-Desktop (without motor), or Motor & Controller |
| Dimensions   | HxWxD 48x56x97 mm (additional motor shaft 20 mm)      |

**Description, please looking on page 5.010**

### SMC pollux Ordering information

| Pocket Desktop | Order-No.         | Motor & Controller System | Order-No.         |
|----------------|-------------------|---------------------------|-------------------|
| Type I         | <b>7160-9-511</b> | Type I                    | <b>7160-9-501</b> |
| Type II        | <b>7160-9-512</b> | Type II                   | <b>7160-9-502</b> |
| Type III       | <b>7160-9-513</b> | Type III                  | <b>7160-9-503</b> |

| SMC pollux Accessories   | Order-No.         |
|--|-------------------|
| SMC pollux RS232 cable RJ45-RJ45, 1.8 m length to combine 2 pollux controller (SMCpollux Daisy-Chain RS232)        | <b>7160-9-526</b> |
| SMC pollux RS232 cable RJ45-RJ45, 0.9 m length to combine 2 pollux controller (SMCpollux Daisy-Chain RS232)        | <b>7160-9-527</b> |
| SMC pollux RS232 cable RJ45-RJ45, 0.5 m length to combine 2 pollux controller (SMCpollux Daisy-Chain RS232)        | <b>7160-9-528</b> |
| SMC pollux RS232 cable RJ45-RJ45, 0.3 m length to combine 2 pollux controller (SMC pollux Daisy-Chain RS232)       | <b>7160-9-529</b> |
| SMC pollux RS232 cable RJ45-RJ45, 1.8 m length to combine 2 pollux controller (SMC pollux Daisy-Chain RS232/Power) | <b>7160-9-521</b> |
| SMC pollux RS232 cable RJ45-RJ45, 0.9 m length to combine 2 pollux controller (SMC pollux Daisy-Chain RS232/Power) | <b>7160-9-523</b> |
| SMC pollux RS232 cable RJ45-RJ45, 0.5 m length to combine 2 pollux controller (SMC pollux Daisy-Chain RS232/Power) | <b>7160-9-524</b> |
| SMC pollux RS232 cable RJ45-RJ45, 0.3 m length to combine 2 pollux controller (SMC pollux Daisy-Chain RS232/Power) | <b>7160-9-525</b> |

|   |            |
|---|------------|
| SMC pollux RS232 cable DSub9-RJ45, 2 m length for PC-connection | 7160-9-520 |
| SMC pollux power supply, 60W, 90-264 VAC                        | 7160-9-522 |
| SMC pollux Update I upto II                                     | 7160-9-540 |

MOTION CONTROL Systems Positioners MiniPos DirectDrives Controllers ManPos Accessories Vacuum MAC PhotonX M A C

## ORDERING EXAMPLE SMC POLLUX DESKTOP



power supply input

RJ45-RJ45 & power

RS232 cable DSub9-RJ45

Pocket Desktop, 2 axes application

## FOLLOWING SMC POLLUX MOTOR & CONTROLLER AVAILABLE IN STANDARD PRODUCTS




Motor & Controller System with DT-80



Motor & Controller System with SF-3000 LS



Motor & Controller System with VT-80

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