

Free Mount Cylinder Double Acting, Single Rod

CU Series

ø6, ø10, ø16, ø20, ø25, ø32

How to Order

CU 6 [] - 30 D - []

With auto switch CDU 6 [] - 30 D - M9BW [] - []

- Built-in magnet**
- Bore size**

| | |
|----|-------|
| 6 | 6 mm |
| 10 | 10 mm |
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |
- Port thread type**

| Symbol | Type | Bore size |
|--------|----------|------------------------|
| Nil | M5 x 0.8 | ø6, ø10, ø16, ø20, ø25 |
| | Rc 1/8 | ø32 |
| TN | NPT 1/8 | ø32 |
| TF | G 1/8 | ø32 |
- Action**

| | |
|---|---------------|
| D | Double acting |
|---|---------------|
- Auto switch**

| | |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

* Refer to the table below for applicable auto switches.
- Number of auto switches**

| | |
|-----|--------|
| Nil | 2 pcs. |
| S | 1 pc. |
- Made to Order**
* Refer to page 728 for the Made to Order specifications.
- Standard stroke (mm)**

| | |
|---------------|-------------------------------|
| ø6, ø10, ø16 | 5, 10, 15, 20, 25, 30 |
| ø20, ø25, ø32 | 5, 10, 15, 20, 25, 30, 40, 50 |

Built-in Magnet Cylinder Model
If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example): CDU20-25D

Applicable Auto Switches/Refer to pages 1271 to 1365 for further information on auto switches.

| Type | Special function | Electrical entry | Indicator light | Wiring (Output) | Load voltage | | Auto switch model | | Lead wire length (m) | | | | | Pre-wired connector | Applicable load | | |
|-------------------------|---|------------------|-----------------|-------------------------------------|---------------|--------------------|-------------------|-----------|----------------------|---------------------|--------------------|------------|------------|---------------------|-----------------|---|------------|
| | | | | | DC | AC | Perpendicular | In-line | 0.5 (Nil) | 1 (M) | 3 (L) | 5 (Z) | | | | | |
| Solid state auto switch | — | Grommet | Yes | 3-wire (NPN) | 5 V, 12 V | — | M9NV | M9N | ● | ● | ○ | ○ | Relay, PLC | IC circuit | | | |
| | | | | 3-wire (PNP) | | | M9PV | M9P | ● | ● | ○ | ○ | | | | | |
| | | | | 2-wire | 12 V | M9BV | M9B | ● | ● | ○ | ○ | — | | | | | |
| | | | | 3-wire (NPN) | 5 V, 12 V | M9NWX | M9NW | ● | ● | ○ | ○ | IC circuit | | | | | |
| | Diagnostic indication (2-color indicator) | Grommet | Yes | 3-wire (PNP) | 5 V, 12 V | — | M9PWX | M9PW | ● | ● | ○ | ○ | | IC circuit | | | |
| | | | | 2-wire | | | 12 V | M9BWX | M9BW | ● | ● | ○ | | | ○ | — | |
| | | | | Water resistant (2-color indicator) | Grommet | Yes | 3-wire (NPN) | 5 V, 12 V | — | M9AV ^{*1} | M9NA ^{*1} | ○ | | ○ | ● | ○ | IC circuit |
| | | | | | | | 3-wire (PNP) | | | M9PAV ^{*1} | M9PA ^{*1} | ○ | | ○ | ● | ○ | |
| Reed auto switch | — | Grommet | No | 2-wire | 24 V | 12 V | A96V | A96 | ● | — | — | — | IC circuit | — | | | |
| | | | | 3-wire (NPN equivalent) | — | 5 V | — | — | — | — | — | — | — | IC circuit | — | | |
| | | | | 100 V | 100 V or less | A93V ^{*2} | A93 | ● | ● | ● | — | — | — | Relay, PLC | | | |
| | | | | | | A90V | A90 | ● | — | ● | — | — | — | IC circuit | | | |

*1 Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance.
Consult with SMC regarding water resistant types with the above model numbers.

*2 1 m type lead wire is only applicable to D-A93.

* Lead wire length symbols: 0.5 m Nil (Example) M9NV
1 m M (Example) M9NWX
3 m L (Example) M9NWL
5 m Z (Example) M9NWX

* Solid state auto switches marked with "○" are produced upon receipt of order.

* Since there are applicable auto switches other than the above, refer to page 782 for details.

* For detail about auto switches with pre-wired connector, refer to pages 1340 and 1341.

* Auto switches are shipped together but not assembled.

Free Mount Cylinder Double Acting, Double Rod **CUW Series** ø6, ø10, ø16, ø20, ø25, ø32

How to Order

With auto switch **CDUW** **6** **□** **-** **30** **D** **-** **M9BW** **□**

Built-in magnet •

Double rod •

Bore size •

| | |
|----|-------|
| 6 | 6 mm |
| 10 | 10 mm |
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |

Port thread type •

| Symbol | Type | Bore size |
|--------|----------|------------------------|
| Nil | M5 x 0.8 | ø6, ø10, ø16, ø20, ø25 |
| | Rc 1/8 | ø32 |
| TN | NPT 1/8 | ø32 |
| TF | G 1/8 | ø32 |

Number of auto switches

| | |
|-----|--------|
| Nil | 2 pcs. |
| S | 1 pc. |

Auto switch

| | |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

* Refer to the table below for applicable auto switches.

Action

| | |
|---|---------------|
| D | Double acting |
|---|---------------|

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example): CDUW20-30D

Standard stroke (mm)

| | |
|---------------|--|
| ø6, ø10, ø16 | 5, 10, 15, 20, 25, 30, 40, 50, 60 |
| ø20, ø25, ø32 | 5, 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |

Applicable Auto Switches/Refer to pages 1271 to 1365 for further information on auto switches.

| Type | Special function | Electrical entry | Indicator light | Wiring (Output) | Load voltage | | Auto switch model | | Lead wire length (m) | | | | Pre-wired connector | Applicable load | | | |
|-------------------------|---|------------------|-----------------|-------------------------|--------------|-----------|-------------------|---------------------|----------------------|-------|-------|-------|---------------------|-----------------|------------|------------|------------|
| | | | | | DC | AC | Perpendicular | In-line | 0.5 (Nil) | 1 (M) | 3 (L) | 5 (Z) | | Relay, PLC | Relay, PLC | | |
| Solid state auto switch | Diagnostic indication (2-color indicator) | Grommet | Yes | 3-wire (NPN) | 24 V | 5 V, 12 V | — | M9NV | M9N | ● | ● | ○ | ○ | | | ○ | IC circuit |
| | | | | 3-wire (PNP) | | | | M9PV | M9P | ● | ● | ○ | ○ | ○ | IC circuit | | |
| | | | | 2-wire | | | | M9BV | M9B | ● | ● | ○ | ○ | ○ | — | | |
| | | | | 3-wire (NPN) | | | | M9NVW | M9NW | ● | ● | ○ | ○ | ○ | IC circuit | | |
| | Water resistant (2-color indicator) | Grommet | No | 3-wire (PNP) | 24 V | 5 V, 12 V | — | M9PWW | M9PW | ● | ● | ○ | ○ | ○ | — | Relay, PLC | |
| | | | | 2-wire | | | | M9BWW | M9BW | ● | ● | ○ | ○ | ○ | — | | |
| | | | | 3-wire (NPN) | | | | M9NAV ^{*1} | M9NA ^{*1} | ○ | ○ | ○ | ○ | ○ | IC circuit | | |
| | | | | 3-wire (PNP) | | | | M9PAV ^{*1} | M9PA ^{*1} | ○ | ○ | ○ | ○ | ○ | IC circuit | | |
| Reed auto switch | — | Grommet | Yes | 3-wire (NPN equivalent) | 24 V | 12 V | — | A96V | A96 | ● | — | ● | — | — | IC circuit | — | |
| | | | | 2-wire | | | | A93V ^{*2} | A93 | ● | ● | ● | ● | — | — | | Relay, PLC |
| | | | | 2-wire | | | | A90V ^{*2} | A90 | ● | — | ● | — | — | — | | |

*1 Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance.

Consult with SMC regarding water resistant types with the above model numbers.

*2 1 m type lead wire is only applicable to D-A93.

* Lead wire length symbols: 0.5 m Nil (Example) M9NW * Solid state auto switches marked with "○" are produced upon receipt of order.
1 m M (Example) M9NWM
3 m L (Example) M9NWL
5 m Z (Example) M9NWX

* Since there are applicable auto switches other than the above, refer to page 782 for details.

* For detail about auto switches with pre-wired connector, refer to pages 1340 and 1341.

* Auto switches are shipped together but not assembled.

Free Mount Cylinder

Single Acting, Single Rod, Spring Return/Extend

CU Series

ø6, ø10, ø16, ø20, ø25, ø32

How to Order

CU 10 [] - **15** **S** - []

With auto switch **CDU 10** [] - **15** **S** - **M9BW** [] - []

Built-in magnet •

Bore size •

| | |
|----|-------|
| 6 | 6 mm |
| 10 | 10 mm |
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |

Port thread type •

| Symbol | Type | Bore size |
|--------|----------|------------------------|
| Nil | M5 x 0.8 | ø6, ø10, ø16, ø20, ø25 |
| | Rc 1/8 | ø32 |
| TN | NPT 1/8 | ø32 |
| TF | G 1/8 | ø32 |

Action

| | |
|---|------------------------------|
| S | Single acting, Spring return |
| T | Single acting, Spring extend |

Standard stroke (mm)

| | |
|---------------|-----------|
| ø6, ø10, ø16 | 5, 10, 15 |
| ø20, ø25, ø32 | |

Number of auto switches

| | |
|-----|--------|
| Nil | 2 pcs. |
| S | 1 pc. |

Auto switch

• Refer to the table below for applicable auto switches.

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example): CDU20-10S

Made to Order
* Refer to page 740 for the Made to Order specifications.

Applicable Auto Switches

Refer to pages 1271 to 1365 for further information on auto switches.

| Type | Special function | Electrical entry | Indicator light | Wiring (Output) | Load voltage | | Auto switch model | | Lead wire length (m) | | | | Pre-wired connector | Applicable load | | | | | | | |
|-------------------------------------|------------------|------------------|-----------------|-----------------|--------------|-----------|-------------------|---------------------|-------------------------|-------|-------|---------------|---------------------|-----------------|--------------|--------------|--------|--------------|--------------|------------|---|
| | | | | | DC | AC | Perpendicular | In-line | 0.5 (Nil) | 1 (M) | 3 (L) | 5 (Z) | | | | | | | | | |
| | | | | | | | | | | | | | | | 3-wire (NPN) | 3-wire (PNP) | 2-wire | 3-wire (NPN) | 3-wire (PNP) | 2-wire | |
| Solid state auto switch | — | Grommet | Yes | 3-wire (NPN) | 24 V | 5 V, 12 V | — | M9NV | M9N | ● | ● | ○ | ○ | IC circuit | Relay, PLC | | | | | | |
| | | | | 3-wire (PNP) | | | | M9PV | M9P | ● | ● | ○ | ○ | | | | | | | | |
| | | | | 2-wire | | | | M9BV | M9B | ● | ● | ○ | ○ | | | | | | | | |
| | 3-wire (NPN) | | | M9NWV | | | | M9NW | ● | ● | ○ | ○ | IC circuit | | | | | | | | |
| | 3-wire (PNP) | | | M9PWW | | | | M9PW | ● | ● | ○ | ○ | | | | | | | | | |
| | 2-wire | | | M9BWW | | | | M9BW | ● | ● | ○ | ○ | | | | | | | | | |
| Water resistant (2-color indicator) | Grommet | Yes | No | 3-wire (NPN) | 24 V | 5 V, 12 V | — | M9NAV ^{*1} | M9NA ^{*1} | ○ | ○ | ○ | ○ | IC circuit | — | | | | | | |
| | | | | 3-wire (PNP) | | | | M9PAV ^{*1} | M9PA ^{*1} | ○ | ○ | ○ | ○ | | | | | | | | |
| | | | | 2-wire | | | | M9BAV ^{*1} | M9BA ^{*1} | ○ | ○ | ● | ○ | ○ | | | | | | | |
| — | Grommet | | | Yes | | | | No | 3-wire (NPN equivalent) | 24 V | 12 V | 100 V or less | A96V | A96 | | ● | — | ● | — | IC circuit | — |
| | | | | | | | | | 2-wire | | | | A93V ^{*2} | A93 | | ● | ● | ● | ● | | |
| | | | | | | | | | 2-wire | | | | A90V ^{*1} | A90 | | ● | — | ● | — | — | |

*1 Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance.
Consult with SMC regarding water resistant types with the above model numbers.

*2 1 m type lead wire is only applicable to D-A93.

* Lead wire length symbols: 0.5 m Nil (Example) M9NV
1 m M (Example) M9NWW
3 m L (Example) M9NWL
5 m Z (Example) M9NWW

* Solid state auto switches marked with "○" are produced upon receipt of order.

* Since there are applicable auto switches other than the above, refer to page 782 for details.
* For detail about auto switches with pre-wired connector, refer to pages 1340 and 1341.
* Auto switches are shipped together but not assembled.

Free Mount Cylinder: Non-rotating Rod Type

Double Acting, Single Rod

CUK Series

ø6, ø10, ø16, ø20, ø25, ø32

How to Order

With auto switch

CUK 6 [] - 30 D - []

CDUK 6 [] - 30 D - M9BW [] - []

- Built-in magnet
- Non-rotating rod type
- Bore size

| | |
|----|-------|
| 6 | 6 mm |
| 10 | 10 mm |
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |
- Port thread type

| Symbol | Type | Bore size |
|--------|----------|------------------------|
| Nil | M5 x 0.8 | ø6, ø10, ø16, ø20, ø25 |
| | Rc 1/8 | ø32 |
| TN | NPT 1/8 | ø32 |
| TF | G 1/8 | ø32 |
- Action

| | |
|---|---------------|
| D | Double acting |
|---|---------------|
- Standard stroke (mm)

| | |
|---------------|-------------------------------|
| ø6, ø10, ø16 | 5, 10, 15, 20, 25, 30 |
| ø20, ø25, ø32 | 5, 10, 15, 20, 25, 30, 40, 50 |
- Auto switch

| | |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

* Refer to the table below for applicable auto switches.
- Number of auto switches

| | |
|-----|--------|
| Nil | 2 pcs. |
| S | 1 pc. |
- Made to Order

* Refer to page 747 for the Made to Order specifications.

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example): CDUK20-25D

Applicable Auto Switches

Refer to pages 1271 to 1365 for further information on auto switches.

| Type | Special function | Electrical entry | Indicator light | Wiring (Output) | Load voltage | | Auto switch model | | Lead wire length (m) | | | | | Pre-wired connector | Applicable load | | | |
|-------------------------------------|------------------|------------------|-----------------|-----------------|--------------|-------------------------|--------------------|---------|----------------------|--------------------|-------|-------|------------|---------------------|-----------------|---|------------|------------|
| | | | | | DC | AC | Perpendicular | In-line | 0.5 (Nil) | 1 (M) | 3 (L) | 5 (Z) | | | | | | |
| Solid state auto switch | — | Grommet | Yes | 3-wire (NPN) | 5 V, 12 V | — | M9NV | M9N | ● | ● | ● | ○ | ○ | IC circuit | Relay, PLC | | | |
| | | | | 3-wire (PNP) | | | M9PV | M9P | ● | ● | ● | ○ | ○ | | | | | |
| | | | | 2-wire | M9BV | | M9B | ● | ● | ● | ○ | ○ | — | | | | | |
| | 3-wire (NPN) | | | 5 V, 12 V | M9NWX | | M9NW | ● | ● | ● | ○ | ○ | IC circuit | | | | | |
| | 3-wire (PNP) | | | | M9PWV | | M9PW | ● | ● | ● | ○ | ○ | | | | | | |
| | 2-wire | | | 12 V | M9BWX | | M9BW | ● | ● | ● | ○ | ○ | — | | | | | |
| Water resistant (2-color indicator) | Grommet | Yes | 3-wire (NPN) | 5 V, 12 V | — | M9NAV ^{*1} | M9NA ^{*1} | ○ | ○ | ○ | ○ | ○ | IC circuit | | | | | |
| | | | 3-wire (PNP) | | | M9PAV ^{*1} | M9PA ^{*1} | ○ | ○ | ○ | ○ | ○ | | | | | | |
| | | | 2-wire | 12 V | | M9BAV ^{*1} | M9BA ^{*1} | ○ | ○ | ○ | ○ | ○ | — | | | | | |
| Reed auto switch | — | | Grommet | Yes | | 3-wire (NPN equivalent) | — | 5 V | — | A96V | A96 | ● | — | ● | — | — | IC circuit | — |
| | | | | | | 2-wire | 24 V | 12 V | 100 V | A93V ^{*2} | A93 | ● | ● | ● | ● | — | — | Relay, PLC |
| | | | | No | | 2-wire | 24 V | 12 V | 100 V or less | A90V | A90 | ● | — | ● | — | — | IC circuit | PLC |

*1 Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance.

Consult with SMC regarding water resistant types with the above model numbers.

*2 1 m type lead wire is only applicable to D-A93.

* Lead wire length symbols: 0.5 m Nil (Example) M9NV
 1 m M (Example) M9NVM
 3 m L (Example) M9NWL
 5 m Z (Example) M9NVZ

* Solid state auto switches marked with "○" are produced upon receipt of order.

* Since there are applicable auto switches other than the above, refer to page 782 for details.

* For detail about auto switches with pre-wired connector, refer to pages 1340 and 1341.

* Auto switches are shipped together but not assembled.

Free Mount Cylinder: Non-rotating Rod Type Double Acting, Double Rod

CUKW Series

ø6, ø10, ø16, ø20, ø25, ø32

How to Order

With auto switch

CUKW 6 [] - 30 D

CDUKW 6 [] - 30 D - M9BW []

Built-in magnet

Non-rotating rod type

Double rod

Bore size

| | |
|----|-------|
| 6 | 6 mm |
| 10 | 10 mm |
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |

Port thread type

| Symbol | Type | Bore size |
|--------|----------|------------------------|
| Nil | M5 x 0.8 | ø6, ø10, ø16, ø20, ø25 |
| Rc | 1/8 | ø32 |
| TN | NPT 1/8 | ø32 |
| TF | G 1/8 | ø32 |

Number of auto switches

| | |
|-----|--------|
| Nil | 2 pcs. |
| S | 1 pc. |

Auto switch

| | |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

* Refer to the table below for applicable auto switches.

Action

| | |
|---|---------------|
| D | Double acting |
|---|---------------|

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example): CDUKW20-25D

Standard stroke (mm)

| | |
|---------------|--|
| ø6, ø10, ø16 | 5, 10, 15, 20, 25, 30, 40, 50, 60 |
| ø20, ø25, ø32 | 5, 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |

Applicable Auto Switches

Refer to pages 1271 to 1365 for further information on auto switches.

| Type | Special function | Electrical entry | Indicator light | Wiring (Output) | Load voltage | | Auto switch model | | Lead wire length (m) | | | Pre-wired connector | Applicable load | | |
|-------------------------------------|---|------------------|-----------------|-------------------------|--------------|---------------------|---------------------|--------------------|----------------------|-------|-------|---------------------|-----------------|-------|------------|
| | | | | | DC | AC | Perpendicular | In-line | 0.5 (Nil) | 1 (M) | 3 (L) | | | 5 (Z) | |
| | | | | | | | | | | | | | | | 5 V, 12 V |
| Solid state auto switch | — | Grommet | Yes | 3-wire (NPN) | 24 V | — | M9NV | M9N | ● | ● | ○ | ○ | Relay, PLC | | |
| | | | | 3-wire (PNP) | | | M9PV | M9P | ● | ● | ○ | ○ | | | |
| | | | | 2-wire | | | M9BV | M9B | ● | ● | ○ | ○ | | | |
| | | | | 3-wire (NPN) | | | M9NWX | M9NW | ● | ● | ○ | ○ | | | |
| | Diagnostic indication (2-color indicator) | Grommet | Yes | 3-wire (PNP) | 24 V | — | M9PWV | M9PW | ● | ● | ○ | ○ | | | |
| | | | | 2-wire | | | M9BWX | M9BW | ● | ● | ○ | ○ | | | |
| | | | | 3-wire (NPN) | | | M9NAV ^{*1} | M9NA ^{*1} | ○ | ○ | ● | ○ | | | |
| | | | | 3-wire (PNP) | | | M9PAV ^{*1} | M9PA ^{*1} | ○ | ○ | ● | ○ | | | |
| Water resistant (2-color indicator) | Grommet | Yes | 2-wire | 24 V | 12 V | M9BAV ^{*1} | M9BA ^{*1} | ○ | ○ | ● | ○ | | | | |
| | | | 3-wire (NPN) | | | — | 5 V | — | A96V | A96 | ● | ● | — | — | IC circuit |
| | | | 3-wire (PNP) | | | | | | | | | | | | |
| | | | 2-wire | | | | | | | | | | | | |
| 2-wire | | | | | | | | | | | | | | | |
| Reed auto switch | — | Grommet | No | 3-wire (NPN equivalent) | 24 V | 12 V | — | 100 V | A93V ^{*2} | A93 | ● | ● | ● | — | Relay, PLC |
| | | | | 2-wire | | | | | 100 V or less | A90V | A90 | ● | — | ● | |

*1 Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance. Consult with SMC regarding water resistant types with the above model numbers.

*2 1 m type lead wire is only applicable to D-A93.

* Lead wire length symbols: 0.5 m Nil (Example) M9NW
1 m M (Example) M9NWX
3 m L (Example) M9NWL
5 m Z (Example) M9NWX

* Solid state auto switches marked with "○" are produced upon receipt of order.

* Since there are applicable auto switches other than the above, refer to page 782 for details.

* For detail about auto switches with pre-wired connector, refer to pages 1340 and 1341.

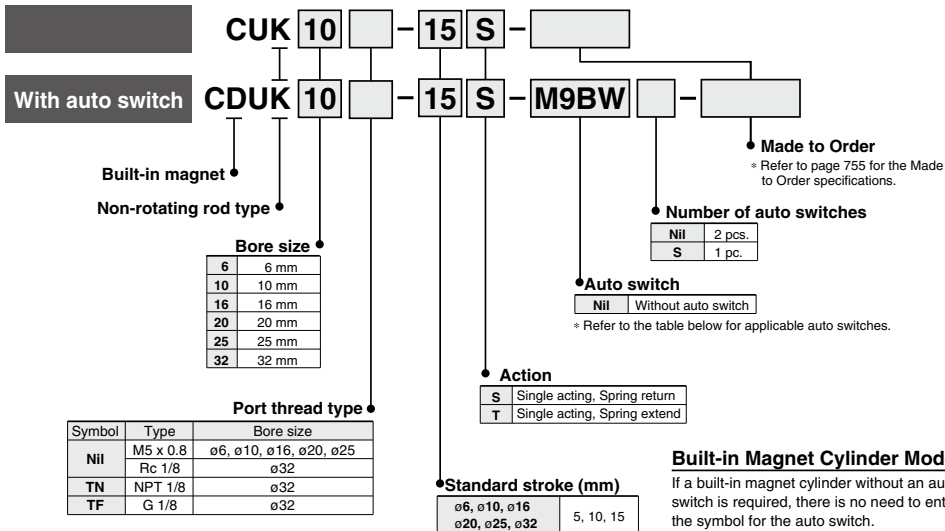
* Auto switches are shipped together but not assembled.

Free Mount Cylinder: Non-rotating Rod Type Single Acting, Spring Return/Extend

CUK Series

ø6, ø10, ø16, ø20, ø25, ø32

How to Order



Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example): CDUK20-10S

Applicable Auto Switches

Refer to pages 1271 to 1365 for further information on auto switches.

| Type | Special function | Electrical entry | Indicator light | Wiring (Output) | Load voltage | | Auto switch model | | Lead wire length (m) | | | Pre-wired connector | Applicable load | | |
|-------------------------------------|------------------|------------------|-----------------|-------------------------|--------------|-----------|-------------------|---------------------|----------------------|--------------------|-------|---------------------|-----------------|------------|------------|
| | | | | | DC | AC | Perpendicular | In-line | 0.5 (Nil) | 1 (M) | 3 (L) | | 5 (Z) | | |
| Solid state auto switch | — | Grommet | Yes | 3-wire (NPN) | 24 V | 5 V, 12 V | — | M9NV | M9N | ● | ● | ● | ○ | IC circuit | Relay, PLC |
| | | | | 3-wire (PNP) | | | | M9PV | M9P | ● | ● | ● | ○ | | |
| | | | | 2-wire | | | | M9BV | M9B | ● | ● | ● | ○ | | |
| | 3-wire (NPN) | | | M9NWX | | | | M9NW | ● | ● | ○ | ○ | IC circuit | | |
| | 3-wire (PNP) | | | M9PWX | | | | M9PW | ● | ● | ○ | ○ | | | |
| | 2-wire | | | M9BWX | | | | M9BW | ● | ● | ○ | ○ | | | |
| Water resistant (2-color indicator) | Grommet | Yes | 3-wire (NPN) | 24 V | 5 V, 12 V | — | — | M9NAV ^{*1} | M9NA ^{*1} | ○ | ○ | ● | ○ | IC circuit | Relay, PLC |
| | | | 3-wire (PNP) | | | | | M9PAV ^{*1} | M9PA ^{*1} | ○ | ○ | ○ | ○ | | |
| | | | 2-wire | | | | | M9BAV ^{*1} | M9BA ^{*1} | ○ | ○ | ● | ○ | | |
| Reed auto switch | — | Grommet | Yes | 3-wire (NPN equivalent) | 24 V | 12 V | 100 V | A96V | A96 | ● | — | ● | — | IC circuit | — |
| | | | | No | | | | 2-wire | 100 V or less | A93V ^{*2} | A93 | ● | ● | | |
| | | | | | | | | A90V ^{*1} | A90 | ● | — | ● | — | IC circuit | PLC |

*1 Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance.

Consult with SMC regarding water resistant types with the above model numbers.

*2 1 m type lead wire is only applicable to D-A93.

* Lead wire length symbols: 0.5 m Nil (Example) M9NV
1 m M (Example) M9NWX
3 m L (Example) M9NWL
5 m Z (Example) M9NWX

* Solid state auto switches marked with "○" are produced upon receipt of order.

* Since there are applicable auto switches other than the above, refer to page 782 for details.

* For detail about auto switches with pre-wired connector, refer to pages 1340 and 1341.

* Auto switches are shipped together but not assembled.

Free Mount Cylinder: Long Stroke Type Double Acting, Single Rod

CU Series

ø6, ø10, ø16, ø20, ø25, ø32

How to Order

With auto switch CDU 6 [] - 60 D - M9BW [] - []

Built-in magnet CU 6 [] - 60 D - []

Bore size

| | |
|----|-------|
| 6 | 6 mm |
| 10 | 10 mm |
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |

Port thread type

| Symbol | Type | Bore size |
|--------|----------|------------------------|
| Nil | M5 x 0.8 | ø6, ø10, ø16, ø20, ø25 |
| | Rc 1/8 | ø32 |
| TN | NPT 1/8 | ø32 |
| TF | G 1/8 | ø32 |

Action

| | |
|---|---------------|
| D | Double acting |
|---|---------------|

Long stroke (mm)

| | |
|---------------|---------------------|
| ø6, ø10, ø16 | 40, 50, 60 |
| ø20, ø25, ø32 | 60, 70, 80, 90, 100 |

Made to Order
* Refer to page 761 for the Made to Order specifications.

Number of auto switches

| | |
|-----|--------|
| Nil | 2 pcs. |
| S | 1 pc. |

Auto switch

| | |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

* Refer to the table below for applicable auto switches.

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example): CDU20-80D

Applicable Auto Switches

Refer to pages 1271 to 1365 for further information on auto switches.

| Type | Special function | Electrical entry | Indicator light | Wiring (Output) | Load voltage | | Auto switch model | | Lead wire length (m) | | | Pre-wired connector | Applicable load | | | |
|---|------------------|------------------|-----------------|-------------------------|--------------|-----------|-------------------|---------------------|----------------------|--------------------|-------|---------------------|-----------------|------------|------------|--------------|
| | | | | | DC | AC | Perpendicular | In-line | 0.5 (Nil) | 1 (M) | 3 (L) | | 5 (Z) | | | |
| Solid state auto switch | — | Grommet | Yes | 3-wire (NPN) | 24 V | 5 V, 12 V | — | M9NV | M9N | ● | ● | ○ | ○ | IC circuit | Relay, PLC | |
| | | | | 3-wire (PNP) | | | | M9PV | M9P | ● | ● | ○ | ○ | | | |
| | | | | 2-wire | | | | M9BV | M9B | ● | ● | ○ | ○ | | | |
| | 3-wire (NPN) | | | M9NWW | | | | M9NW | ● | ● | ○ | ○ | | | | |
| | 3-wire (PNP) | | | M9PWW | | | | M9PW | ● | ● | ○ | ○ | | | | |
| | 2-wire | | | M9BWW | | | | M9BW | ● | ● | ○ | ○ | | | | |
| Diagnostic indication (2-color indicator) | Grommet | Yes | 3-wire (NPN) | 24 V | 5 V, 12 V | — | — | M9NAV ^{*1} | M9NA ^{*1} | ○ | ○ | ○ | ○ | IC circuit | Relay, PLC | |
| | | | | | | | | 3-wire (PNP) | M9PAV ^{*1} | M9PA ^{*1} | ○ | ○ | ○ | | | ○ |
| | | | | | | | | 2-wire | M9BAV ^{*1} | M9BA ^{*1} | ○ | ○ | ● | | | ○ |
| Water resistant (2-color indicator) | Grommet | Yes | 3-wire (NPN) | 24 V | 5 V, 12 V | — | — | — | — | ○ | ○ | ○ | ○ | IC circuit | — | |
| | | | | | | | | | | | | | | | | 3-wire (PNP) |
| Reed auto switch | — | Grommet | No | 3-wire (NPN equivalent) | 24 V | 12 V | 100 V | A93V ^{*2} | A93 | ● | ● | ● | — | IC circuit | Relay, PLC | |
| | | | | 2-wire | | | | 100 V or less | A90V ^{*1} | A90 | ● | — | ● | | | — |

*1 Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance.

Consult with SMC regarding water resistant types with the above model numbers.

*2 1 m type lead wire is only applicable to D-A93.

* Lead wire length symbols: 0.5 m Nil (Example) M9NV
1 m M (Example) M9NWM
3 m L (Example) M9NWL
5 m Z (Example) M9NWX

* Solid state auto switches marked with "○" are produced upon receipt of order.

* Since there are applicable auto switches other than the above, refer to page 782 for details.

* For detail about auto switches with pre-wired connector, refer to pages 1340 and 1341.

* Auto switches are shipped together but not assembled.

Free Mount Cylinder: Long Stroke Type Non-rotating Rod, Double Acting, Single Rod

CUK Series

ø6, ø10, ø16, ø20, ø25, ø32

How to Order

With auto switch

CUK 6 **60** **D** **M9BW**

CDUK 6 **60** **D** **M9BW**

Built-in magnet

Non-rotating rod type

Bore size

| | |
|----|-------|
| 6 | 6 mm |
| 10 | 10 mm |
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |

Port thread type

| Symbol | Type | Bore size |
|--------|----------|------------------------|
| Nil | M5 x 0.8 | ø6, ø10, ø16, ø20, ø25 |
| | Rc 1/8 | ø32 |
| TN | NPT 1/8 | ø32 |
| TF | G 1/8 | ø32 |

Action

| | |
|---|---------------|
| D | Double acting |
|---|---------------|

Cylinder stroke (mm)

| | |
|---------------|---------------------|
| ø6, ø10, ø16 | 40, 50, 60 |
| ø20, ø25, ø32 | 60, 70, 80, 90, 100 |

Made to Order
* Refer to page 765 for the Made to Order specifications.

Number of auto switches

| | |
|-----|--------|
| Nil | 2 pcs. |
| S | 1 pc. |

Auto switch

| | |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

* Refer to the table below for applicable auto switches.

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example): CDUK20-80D

Applicable Auto Switches

Refer to pages 1271 to 1365 for further information on auto switches.

| Type | Special function | Electrical entry | Indicator light | Wiring (Output) | Load voltage | | Auto switch model | | Lead wire length (m) | | | | Pre-wired connector | Applicable load | | |
|-------------------------------------|---|------------------|-----------------|-------------------------|---------------------|---------------------|--------------------|---------|----------------------|-------|-------|-------|---------------------|-----------------|------------|------------|
| | | | | | DC | AC | Perpendicular | In-line | 0.5 (Nil) | 1 (M) | 3 (L) | 5 (Z) | | | | |
| Solid state auto switch | — | Grommet | Yes | 3-wire (NPN) | 5 V, 12 V | — | M9NV | M9N | ● | ● | ● | ○ | ○ | IC circuit | Relay, PLC | |
| | | | | 3-wire (PNP) | | | M9PV | M9P | ● | ● | ● | ○ | ○ | | | |
| | | | | 2-wire | M9BV | M9B | ● | ● | ● | ○ | ○ | — | | | | |
| | | | | 3-wire (NPN) | M9NWX | M9NW | ● | ● | ● | ○ | ○ | ○ | | | | |
| | Diagnostic indication (2-color indicator) | Grommet | Yes | 3-wire (PNP) | 5 V, 12 V | — | M9PWX | M9PW | ● | ● | ● | ○ | ○ | ○ | IC circuit | Relay, PLC |
| | | | | 2-wire | | | M9BWX | M9BW | ● | ● | ● | ○ | ○ | — | | |
| | | | | 3-wire (NPN) | M9NAV ^{*1} | M9NA ^{*1} | ○ | ○ | ○ | ○ | ○ | ○ | IC circuit | Relay, PLC | | |
| | | | | 3-wire (PNP) | M9PAV ^{*1} | M9PA ^{*1} | ○ | ○ | ○ | ○ | ○ | ○ | | | | |
| Water resistant (2-color indicator) | Grommet | Yes | 2-wire | 5 V, 12 V | — | M9BAV ^{*1} | M9BA ^{*1} | ○ | ○ | ○ | ○ | ○ | ○ | IC circuit | — | |
| | | | 3-wire | 12 V | — | M9BAV ^{*1} | M9BA ^{*1} | ○ | ○ | ○ | ○ | ○ | ○ | | | |
| Reed auto switch | — | Grommet | Yes | 3-wire (NPN equivalent) | — | 5 V | — | A96V | A96 | ● | — | — | — | — | IC circuit | — |
| | | | | No | 2-wire | 24 V | 12 V | 100 V | A93V ^{*2} | A93 | ● | ● | ● | ● | — | — |
| | | | | | | 100 V or less | A90V | A90 | ● | — | ● | — | — | — | IC circuit | — |

*1 Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance. Consult with SMC regarding water resistant types with the above model numbers.

*2 1 m type lead wire is only applicable to D-A93.

* Lead wire length symbols: 0.5 m Nil (Example) M9NV
1 m M (Example) M9NWM
3 m L (Example) M9NWL
5 m Z (Example) M9NWX

* Solid state auto switches marked with "○" are produced upon receipt of order.

* Since there are applicable auto switches other than the above, refer to page 782 for details.

* For detail about auto switches with pre-wired connector, refer to pages 1340 and 1341.

* Auto switches are shipped together but not assembled.

Free Mount Cylinder with Air Cushion

CU Series

ø20, ø25, ø32

How to Order

CU 32 [] - 50 A

With auto switch **CDU 32 [] - 50 A - M9BW []**

With auto switch (Built-in magnet)

Bore size

| | |
|----|-------|
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |

Thread type

| Symbol | Type | Bore size |
|--------|----------|-----------|
| Nil | M5 x 0.8 | ø20, ø25 |
| | Rc 1/8 | ø32 |
| TN | NPT 1/8 | ø32 |
| TF | G 1/8 | |

Number of auto switches

| | |
|-----|--------|
| Nil | 2 pcs. |
| S | 1 pc. |

Auto switch

| | |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

* Refer to the table below for applicable auto switches.

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example): CDU25-50A

Air cushion

| | |
|---|------------------|
| A | With air cushion |
|---|------------------|

Cylinder stroke (mm)
Refer to next page for "Standard Stroke".

Applicable Auto Switches/Refer to pages 1271 to 1403 for further information on auto switches.

| Type | Special function | Electrical entry | Indicator light | Wiring (Output) | Load voltage | | Auto switch model | | Lead wire length (m) | | | | | Pre-wired connector | Applicable load | | | |
|-------------------------|---|------------------|-----------------|-------------------------|---------------------|--------------------|-------------------|---------------|----------------------|-------|-------|-------|---|---------------------|-----------------|------------|------------|------------|
| | | | | | DC | AC | Perpendicular | In-line | 0.5 (Nil) | 1 (M) | 3 (L) | 5 (Z) | | | | | | |
| Solid state auto switch | — | Grommet | Yes | 3-wire (NPN) | 24 V | 5 V, 12 V | — | M9NV | M9N | ● | ● | ○ | ○ | ○ | IC circuit | Relay, PLC | | |
| | | | | 3-wire (PNP) | | | | M9PV | M9P | ● | ● | ○ | ○ | | | | | |
| | | | | 2-wire | | | | M9BV | M9B | ● | ● | ○ | ○ | | | | | |
| | | | | 3-wire (NPN) | | | | M9NVW | M9NW | ● | ● | ○ | ○ | | | | | |
| | Diagnostic indication (2-color indicator) | | | 3-wire (PNP) | M9PVW | M9PW | ● | ● | ○ | ○ | | | | | | | | |
| | | | | 2-wire | M9BWW | M9BW | ● | ● | ○ | ○ | | | | | | | | |
| | Water resistant (2-color indicator) | | | 3-wire (NPN) | M9NAV ^{*1} | M9NA ^{*1} | ○ | ○ | ● | ○ | ○ | ○ | ○ | ○ | | | ○ | IC circuit |
| | | | | 3-wire (PNP) | M9PAV ^{*1} | M9PA ^{*1} | ○ | ○ | ○ | ● | ○ | ○ | ○ | ○ | | | ○ | IC circuit |
| Reed auto switch | — | Grommet | Yes | 3-wire (NPN equivalent) | 24 V | 5 V | — | A96V | A96 | ● | — | ● | — | — | IC circuit | — | | |
| | | | | 2-wire | | | | 100 V | A93V ^{*2} | A93 | ● | ● | ● | ● | — | — | Relay, PLC | |
| | | | | | | | | 100 V or less | A90V | A90 | ● | — | ● | — | — | — | IC circuit | |

*1 Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance.

Consult with SMC regarding water resistant types with the above model numbers.

*2 1 m type lead wire is only applicable to D-A93.

* Lead wire length symbols: 0.5 m Nil (Example) M9NV
 1 m M (Example) M9NVW
 3 m L (Example) M9NWL
 5 m Z (Example) M9NWX

* Solid state auto switches marked with "○" are produced upon receipt of order.

* Since there are applicable auto switches other than the above, refer to page 782 for details.

* For detail about auto switches with pre-wired connector, refer to pages 1340 and 1341.

* Auto switches are shipped together but not assembled.