

Air Cylinder: Standard Type Double Acting, Single Rod

CJ2 Series

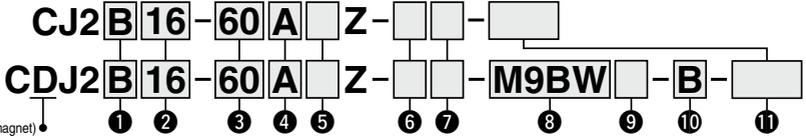
ø6, ø10, ø16

RoHS



How to Order

With auto switch



With auto switch (Built-in magnet)

1 Mounting

B	Basic
E	Double-side bossed
D**	Double clevis
L	Single foot
M	Double foot
F	Rod flange
G	Head flange

- *: Foot/Flange brackets are shipped together with the product, but not assembled.
- *: Double clevis is only available for ø10 and ø16.
- *: Refer to page 182 for the double clevis (with one-touch connecting pin).

8 Auto switch

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

- *: For applicable auto switches, refer to the table below.
- ★ Enter the auto switch mounting type (A or B) even when a built-in magnet cylinder without an auto switch is required.

2 Bore size

6	6 mm
10	10 mm
16	16 mm

5 Head cover port location

Nil	Perpendicular to axis	
R	Axial	

- *: For double clevis, the product is perpendicular to the cylinder axis.
- *: For double-side bossed, the product is perpendicular to the cylinder axis.

9 Number of auto switches

Nil	2 pcs.
S	1 pc.
n	"n" pcs.

3 Cylinder standard stroke [mm]

Refer to "Standard Strokes" on page 75.

6 Pivot bracket

Nil	None
N	Pivot bracket is shipped together with the product.

- *: Only for the double clevis type (ø10 and ø16)
- *: Pivot bracket is shipped together with the product, but not assembled.

10 Auto switch mounting type

A	Rail mounting
B	Band mounting

- *: For rail mounting, screws and nuts for 2 auto switches come with the rail.
- *: Refer to page 178 for auto switch mounting brackets.
- *: ø6: Band mounting only

4 Cushion

Nil	Rubber bumper
A	Air cushion

- *: ø6: Rubber bumper only

7 Rod end bracket

Nil	None
V	Single knuckle joint
W**	Double knuckle joint
T	Rod end cap (Flat type)
U	Rod end cap (Round type)

- *: Rod end bracket is shipped together with the product, but not assembled.
- *: Single/Double knuckle joint: ø10 and ø16 only
- *: Refer to page 91 for the double knuckle joint (with one-touch connecting pin).

11 Made to Order

Refer to page 75 for details.

*: Refer to "Ordering Example of Cylinder Assembly" on page 75.

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	Band mounting		Rail mounting		0.5 (Nil)	1 (M)	3 (L)	5 (Z)			None (N)
							Perpendicular	In-line	Perpendicular	In-line							
Solid state auto switch	—	Grommet	—	3-wire (NPN)	5 V, 12 V	—	M9NV	M9N	M9NV	M9N	●	●	○	—	○	IC circuit	
				3-wire (PNP)			M9PV	M9P	M9PV	M9P	●	●	○	—	○		
		Connector	2-wire	12 V	—	H7C	J79C	—	●	●	●	●	—	—	—		
					M9NVV	M9NW	M9NVV	M9NW	●	●	○	—	○				
	Diagnostic indication (2-color indicator)	Grommet	Yes	—	3-wire (NPN)	5 V, 12 V	—	M9PWV	M9PW	M9PWV	M9PW	●	●	○	—	○	IC circuit
					3-wire (PNP)			M9BWW	M9BW	M9BWW	M9BW	●	●	○	—	○	
		Grommet	—	2-wire	12 V	M9NAV ^{*1}	M9NA ^{*1}	M9NAV ^{*1}	M9NA ^{*1}	○	○	○	—	○	IC circuit		
						M9PAV ^{*1}	M9PA ^{*1}	M9PAV ^{*1}	M9PA ^{*1}	○	○	○	—	○			
Water resistant (2-color indicator)	Grommet	—	—	3-wire (NPN)	5 V, 12 V	—	M9BAV ^{*1}	M9BA ^{*1}	M9BAV ^{*1}	M9BA ^{*1}	○	○	○	—	○	IC circuit	
				3-wire (PNP)			—	H7NF	—	F79F	●	—	○	—	○		
	Connector	2-wire	24 V	12 V	—	—	—	A96V	A96	A96V	A96	●	—	—	—	IC circuit	
					—	—	—	—	—	A72	A72H	●	—	—	—		
Reed auto switch	—	Grommet	Yes	3-wire (NPN equivalent)	5 V	—	—	—	A93V ^{*2}	A93	A93V ^{*2}	A93	●	●	●	—	IC circuit
							—	—	—	—	—	A90V	A90	●	—	—	
	Diagnostic indication (2-color indicator)	Grommet	Yes	—	2-wire	24 V	12 V	—	—	C73C	A73C	—	●	—	—	—	IC circuit
								—	—	C80C	A80C	—	●	—	—	—	
		Connector	No	—	—	—	—	—	—	—	A79W	—	—	—	—	—	IC circuit
									—	—	—	—	—	—	—	—	

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

Please contact 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 5 m..... Z (Example) M9NWZ
 1 m..... M (Example) M9NWM None..... N (Example) H7CN
 3 m..... L (Example) M9NWL

*: Since there are other applicable auto switches than listed above, refer to page 179 for details.

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

*: The D-A9C/M9C/A7C/A8C/F7C/J7C auto switches are shipped together, but not assembled. (For band mounting, only the auto switch mounting brackets are assembled before shipment.)

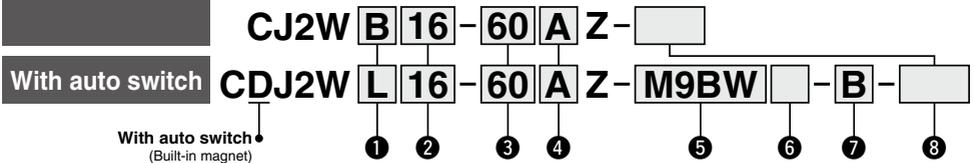
Air Cylinder: Standard Type Double Acting, Double Rod

CJ2W Series

ø6, ø10, ø16



How to Order



1 Mounting

B	Basic
L	Foot
F	Flange

*: Foot/Flange brackets are shipped together with the product, but not assembled.

5 Auto switch

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

*: For applicable auto switches, refer to the table below.

* Enter the auto switch mounting type (A or B) even when a built-in magnet cylinder without an auto switch is required.

2 Bore size

6	6 mm
10	10 mm
16	16 mm

6 Number of auto switches

Nil	2 pcs.
S	1 pc.
n	"n" pcs.

3 Cylinder standard stroke [mm]

Refer to "Standard Strokes" on page 95.

4 Cushion

Nil	Rubber bumper
A	Air cushion

*: ø6: Rubber bumper only

7 Auto switch mounting type

A	Rail mounting
B	Band mounting

*: For rail mounting, screws and nuts for 2 auto switches come with the rail.

*: Refer to page 178 for auto switch mounting brackets.

*: ø6: Band mounting only

8 Made to Order

Refer to page 95 for details.

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	Band mounting		Rail mounting		0.5 (Nil)	1 (M)	3 (L)	5 (Z)			None (N)
							Perpendicular	In-line	Perpendicular	In-line							
Solid state auto switch	—	Grommet	—	3-wire (NPN)	5 V, 12 V	—	M9NV	M9N	M9NV	M9N	●	●	○	○	IC circuit	—	
				3-wire (PNP)			M9PV	M9P	M9PV	M9P	●	●	○	○			
		Connector	2-wire	M9BV	M9B	M9BV	M9B	●	●	○	○						
			—	H7C	J79C	—	—	●	—	●	●						
	Diagnostic indication (2-color indicator)	Grommet	Yes	3-wire (NPN)	5 V, 12 V	—	M9NWV	M9NW	M9NVV	M9NW	●	●	○	○	IC circuit	Relay, PLC	
				3-wire (PNP)			M9PWV	M9PW	M9PVV	M9PW	●	●	○	○			
	Water resistant (2-color indicator)	Grommet	—	2-wire	12 V	—	M9BWV	M9BW	M9BVV	M9BW	●	●	○	○	IC circuit	—	
				3-wire (NPN)			M9NAV ^{*1}	M9NA ^{*1}	M9NAV ^{*1}	M9NA ^{*1}	○	○	○	○			
	With diagnostic output (2-color indicator)	Grommet	—	3-wire (PNP)	5 V, 12 V	—	M9PAV ^{*1}	M9PA ^{*1}	M9PAV ^{*1}	M9PA ^{*1}	○	○	●	○	IC circuit	—	
				2-wire			M9BAV ^{*1}	M9BA ^{*1}	M9BAV ^{*1}	M9BA ^{*1}	○	○	●	○			
Reed auto switch	—	Grommet	Yes	3-wire (NPN equivalent)	5 V	—	A96V	A96	A96V	A96	●	—	●	—	IC circuit	—	
				—			—	A72	A72H	●	—	●	—				
		Connector	No	2-wire	24 V	12 V	100 V or less	A93V ^{*2}	A93	A93V ^{*2}	A93	●	●	●	●	IC circuit	Relay, PLC
								—	—	A90V	A90	A90V	A90	●	—		
		Grommet	Yes	2-wire	24 V	24 V or less	—	C73C	A73C	—	—	●	—	●	●	IC circuit	—
								—	—	C80C	A80C	—	—	●	—		
Diagnostic indication (2-color indicator)	Grommet	Yes	—	—	—	—	A79W	—	—	●	—	●	—	IC circuit	—		

*1: Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance. Please contact 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) M9NWM
 3 m..... L (Example) M9NWL
 5 m..... Z (Example) M9NZZ
 None..... N (Example) H7CN

*: Since there are other applicable auto switches than listed above, refer to page 179 for details.

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

*: The D-A93/M93/A73/A80C/F73/J73 auto switches are shipped together, but not assembled. (For band mounting, only the auto switch mounting brackets are assembled before shipment.)

Air Cylinder: Standard Type Single Acting, Spring Return/Extend

CJ2 Series

ø6, ø10, ø16

RoHS

How to Order



CJ2 **B** **16** - **45** **S** **Z** - **6** **7** - **8** **9** **10** **11**

With auto switch

CDJ2 **B** **16** - **45** **S** **Z** - **6** **7** - **M9BW** **B** - **8** **9** **10** **11**

With auto switch (Built-in magnet)

1 Mounting

B	Basic
E	Double-side bossed
D**	Double clevis
L	Single foot
M	Double foot
F	Rod flange
G	Head flange

*: Foot/Flange brackets are shipped together with the product, but not assembled.

*: Double clevis is only available for ø10 and ø16.

**: Refer to page 182 for the double clevis (with one-touch connecting pin).

8 Auto switch

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

*: For applicable auto switches, refer to the table below.

* Enter the auto switch mounting type (A or B) even when a built-in magnet cylinder without an auto switch is required.

2 Bore size

6	6 mm
10	10 mm
16	16 mm

5 Head cover port location

Nil	Perpendicular to axis	
R	Axial	

*: For double clevis, the product is perpendicular to the cylinder axis.

*: For double-side bossed, the product is perpendicular to the cylinder axis.

*: Not applicable to single acting, spring extend (T).

9 Number of auto switches

Nil	2 pcs.
S	1 pc.
n	"n" pcs.

3 Cylinder standard stroke [mm]

Refer to "Standard Strokes" on page 102.

6 Pivot bracket

Nil	None
N	Pivot bracket is shipped together with the product.

*: Only for the double clevis type (ø10 and ø16)

*: Pivot bracket is shipped together with the product, but not assembled.

10 Auto switch mounting type

A	Rail mounting
B	Band mounting

*: For rail mounting, screws and nuts for 2 auto switches come with the rail.

*: Refer to page 178 for auto switch mounting brackets.

*: ø6: Band mounting only

4 Action

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

7 Rod end bracket

Nil	None
V	Single knuckle joint
W**	Double knuckle joint
T	Rod end cap (Flat type)
U	Rod end cap (Round type)

*: Rod end bracket is shipped together with the product, but not assembled.

**: Single/Double knuckle joint: ø10 and ø16 only

***: Refer to page 91 for the double knuckle joint (with one-touch connecting pin).

11 Made to Order

Refer to page 102 for details.

*: Refer to "Ordering Example of Cylinder Assembly" on page 102.

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

Type	Special function	Electrical entry	Indicating light	Wiring (Output)	Load voltage		Auto switch model				Lead wire length [m]					Pre-wired connector	Applicable load
					DC	AC	Band mounting		Rail mounting		0.5 (Nil)	1 (M)	3 (L)	5 (Z)	None (N)		
							Perpendicular	In-line	Perpendicular	In-line							
Solid state auto switch	—	Grommet	No	3-wire (NPN)	5 V, 12 V	—	M9NV	M9N	M9NV	M9N	●	●	○	○	○	IC circuit	Relay, PLC
				3-wire (PNP)			M9PV	M9P	M9PV	M9P	●	●	○	○	○		
		Connector	No	2-wire	12 V	—	M9BV	M9B	M9BV	M9B	●	●	○	○	○	—	
				3-wire (NPN)	M9NWV	M9NV	M9NWV	M9NV	●	●	○	○	○	—			
	Diagnostic indication (2-color indicator)	Grommet	Yes	3-wire (PNP)	5 V, 12 V	—	M9PWV	M9PW	M9PWV	M9PW	●	●	○	○	○	IC circuit	
				2-wire			M9BWV	M9BW	M9BWV	M9BW	●	●	○	○	○	—	
	Water resistant (2-color indicator)	Grommet	No	3-wire (NPN)	5 V, 12 V	—	M9NAV ^{*1}	M9NA ^{*1}	M9NAV ^{*1}	M9NA ^{*1}	○	○	○	○	○	IC circuit	
				3-wire (PNP)			M9PAV ^{*1}	M9PA ^{*1}	M9PAV ^{*1}	M9PA ^{*1}	○	○	○	○	○	—	
	With diagnostic output (2-color indicator)	Grommet	Yes	2-wire	12 V	—	M9BAV ^{*1}	M9BA ^{*1}	M9BAV ^{*1}	M9BA ^{*1}	○	○	○	○	○	—	
				4-wire (NPN)	5 V, 12 V	—	H7NF	—	H7NF	—	F79F	●	●	○	○	IC circuit	
Reed auto switch	—	Grommet	Yes	3-wire (NPN equivalent)	5 V	—	A96V	A96	A96V	A96	●	—	●	—	—	IC circuit	—
				—			200 V	—	A72	A72H	●	—	●	—	—	—	
				—			100 V	A93V ^{*2}	A93	A93V ^{*2}	A93	●	●	●	—	—	
	Connector	No	2-wire	24 V	12 V	100 V or less	A90V	A90	A90V	A90	●	—	●	—	—	IC circuit	
						24 V or less	C73C	A73C	—	—	—	—	—	—	—	—	
	Diagnostic indication (2-color indicator)	Grommet	Yes	—	—	—	C80C	A80C	—	—	●	—	●	—	—	IC circuit	
—				—	—	A79W	—	—	—	—	—	—	—	—	—		

*1: Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance. Please contact 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 5 m..... Z (Example) M9NWZ
1 m..... M (Example) M9NWM None..... N (Example) H7CN
3 m..... L (Example) M9NWL

*: Since there are other applicable auto switches than listed, refer to page 179 for details.

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

*: The D-A9□/M9□/A7□/A80□/F7□/□ auto switches are shipped together, but not assembled. (For band mounting, only auto switch mounting brackets are assembled before being shipped.)

Air Cylinder: Non-rotating Rod Type Double Acting, Single Rod

CJ2K Series

ø10, ø16



How to Order

CJ2K **B** **16** - **60** **Z** - **10** - **16** - **10** - **16** - **10** - **16** - **10** - **16**

With auto switch

CDJ2K **B** **16** - **60** **Z** - **10** - **16** - **10** - **16** - **10** - **16** - **10** - **16** - **M9BW** - **B** - **10** - **16** - **10** - **16** - **10** - **16**

With auto switch (Built-in magnet)

1 Mounting

B	Basic
E	Double-side bossed
D**	Double clevis
L	Single foot
M	Double foot
F	Rod flange
G	Head flange

*: Foot/Flange brackets are shipped together with the product, but not assembled.

**: Refer to page 182 for the double clevis (with one-touch connecting pin).

7 Auto switch

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

*: For applicable auto switches, refer to the table below.

★ Enter the auto switch mounting type (A or B) even when a built-in magnet cylinder without an auto switch is required.

2 Bore size

10	10 mm
16	16 mm

4 Head cover port location

Nil	Perpendicular to axis	
R	Axial	

*: For double clevis, the product is perpendicular to the cylinder axis.

*: For double-side bossed, the product is perpendicular to the cylinder axis.

8 Number of auto switches

Nil	2 pcs.
S	1 pc.
n	"n" pcs.

3 Cylinder standard stroke [mm]

Refer to "Standard Strokes" on page 119.

5 Pivot bracket

Nil	None
N	Pivot bracket is shipped together with the product.

*: Only for the double clevis type

*: Pivot bracket is shipped together with the product, but not assembled.

6 Rod end bracket

Nil	None
V	Single knuckle joint
W**	Double knuckle joint
T	Rod end cap (Flat type)
U	Rod end cap (Round type)

*: Rod end bracket is shipped together with the product, but not assembled.

**: Refer to page 91 for the double knuckle joint (with one-touch connecting pin).

9 Auto switch mounting type

A	Rail mounting
B	Band mounting

*: For rail mounting, screws and nuts for 2 auto switches come with the rail.

*: Refer to page 178 for auto switch mounting brackets.

10 Made to Order

Refer to page 119 for details.

*: Refer to "Ordering Example of Cylinder Assembly" on page 119.

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	Band mounting		Rail mounting		0.5 (Nil)	1 (M)	3 (L)	5 (Z)			None (N)
							Perpendicular	In-line	Perpendicular	In-line							
Solid state auto switch	—	Grommet	—	3-wire (NPN)	5 V, 12 V	—	M9NV	M9N	M9NV	M9N	●	●	●	○	○	IC circuit	
				3-wire (PNP)			M9PV	M9P	M9PV	M9P	●	●	●	○	○		
		Connector	2-wire	M9BV	M9B	M9BV	M9B	●	—	●	○	○	—				
			—	H7C	J79C	—	—	●	—	●	○	○	—				
	Diagnostic indication (2-color indicator)	Grommet	Yes	24 V	3-wire (NPN)	5 V, 12 V	—	M9NVV	M9NW	M9NVV	M9NW	●	●	○	○	○	IC circuit
					3-wire (PNP)			M9PVV	M9PW	M9PVV	M9PW	●	●	●	○	○	
		Connector	2-wire	M9BWW	M9BW	M9BWW	M9BW	●	●	○	○	○	—				
			—	M9NAV ^{*1}	M9NA ^{*1}	M9NAV ^{*1}	M9NA ^{*1}	○	○	○	○	○	—				
Water resistant (2-color indicator)	Grommet	—	—	3-wire (NPN)	5 V, 12 V	—	M9PAV ^{*1}	M9PA ^{*1}	M9PAV ^{*1}	M9PA ^{*1}	○	○	●	○	○	IC circuit	
				3-wire (PNP)			M9BAV ^{*1}	M9BA ^{*1}	M9BAV ^{*1}	M9BA ^{*1}	○	○	○	○	○		
	Connector	2-wire	—	H7NF	—	F79F	●	—	●	○	○	○					
		—	—	—	—	—	—	—	—	—	—	—					
Reed auto switch	—	Grommet	Yes	3-wire (NPN equivalent)	—	—	A96V	A96	A96V	A96	●	—	●	—	—	IC circuit	
							—	—	—	—	—	—	—	—	—		—
	Diagnostic indication (2-color indicator)	Grommet	No	—	2-wire	24 V	12 V	200 V	—	A72	A72H	●	—	●	—	Relay, PLC	
								100 V	A93V ^{*2}	A93	A93V ^{*2}	A93	●	●	●		—
		Connector	Yes	100 V or less	A90V	A90	A90V	A90	●	—	●	—	—				
			No	24 V or less	C73C	A73C	—	—	●	—	●	—	—				
Grommet	Yes	—	C80C	A80C	—	—	●	—	●	—	—						
	No	—	A79W	—	—	—	●	—	●	—	—						

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

Please contact 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 5 m..... Z (Example) M9NWZ
1 m..... M (Example) M9NWM None..... N (Example) H7CN
3 m..... L (Example) M9NWL

*: Since there are other applicable auto switches than listed, refer to page 179 for details.

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

*: The D-A9□/M9□/A7□/A8□/F7□/J7□ auto switches are shipped together, but not assembled. (For band mounting, only auto switch mounting brackets are assembled before being shipped.)

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

CJ2K Series

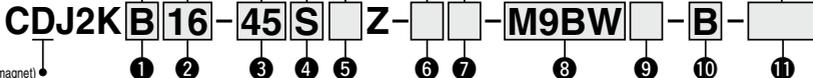
ø10, ø16

RoHS

How to Order



With auto switch



With auto switch (Built-in magnet)

1 Mounting

B	Basic
E	Double-side bossed
D**	Double clevis
L	Single foot
M	Double foot
F	Rod flange
G	Head flange

*: Foot/Flange brackets are shipped together with the product, but not assembled.

** : Refer to page 182 for the double clevis (with one-touch connecting pin).

8 Auto switch

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

*: For applicable auto switches, refer to the table below.

★ Enter the auto switch mounting type (A or B) even when a built-in magnet cylinder without an auto switch is required.

2 Bore size

10	10 mm
16	16 mm

5 Head cover port location

Nil	Perpendicular to axis	
R	Axial	

*: For double clevis, the product is perpendicular to the cylinder axis.
*: For double-side bossed, the product is perpendicular to the cylinder axis.
*: Not applicable to single acting, spring extend (T).

9 Number of auto switches

Nil	2 pcs.
S	1 pc.
n	"n" pcs.

3 Cylinder standard stroke [mm]

Refer to "Standard Strokes" on page 126.

6 Pivot bracket

Nil	None
N	Pivot bracket is shipped together with the product.

*: Only for the double clevis type
*: Pivot bracket is shipped together with the product, but not assembled.

10 Auto switch mounting type

A	Rail mounting
B	Band mounting

*: For rail mounting, screws and nuts for 2 auto switches come with the rail.

*: Refer to page 178 for auto switch mounting brackets.

4 Action

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

7 Rod end bracket

Nil	None
V	Single knuckle joint
W**	Double knuckle joint
T	Rod end cap (Flat type)
U	Rod end cap (Round type)

*: Rod end bracket is shipped together with the product, but not assembled.
** : Refer to page 91 for the double knuckle joint (with one-touch connecting pin).

11 Made to Order

Refer to page 119 for details.

*: Refer to "Ordering Example of Cylinder Assembly" on page 126.

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

Type	Special function	Electrical entry	Indicating light	Wiring (Output)	Load voltage		Auto switch model				Lead wire length [m]				Pre-wired connector	Applicable load	
					DC	AC	Band mounting		Rail mounting		0.5 (Nil)	1 (M)	3 (L)	5 (Z)			None (N)
							Perpendicular	In-line	Perpendicular	In-line							
Solid state auto switch	—	Grommet	No	3-wire (NPN)	5 V, 12 V	—	M9NV	M9N	M9NV	M9N	●	●	●	○	○	IC circuit	
				3-wire (PNP)			M9PV	M9P	M9PV	M9P	●	●	●	○	○		
	Diagnostic indication (2-color indicator)	Connector	Yes	2-wire	12 V	—	M9BV	M9B	M9BV	M9B	●	●	●	○	○	—	
				3-wire (NPN)			M9NWV	M9NV	M9NVV	M9NV	●	●	●	○	○		
	Water resistant (2-color indicator)	Grommet	No	2-wire	12 V	—	M9PWV	M9PW	M9PWV	M9PW	●	●	●	○	○	IC circuit	
				3-wire (NPN)			M9BWW	M9BW	M9BWW	M9BW	●	●	●	○	○		
	With diagnostic output (2-color indicator)	Grommet	Yes	3-wire (PNP)	5 V, 12 V	—	M9NAV ^{*1}	M9NA ^{*1}	M9NAV ^{*1}	M9NA ^{*1}	○	○	○	○	○	IC circuit	
				3-wire (PNP)			M9PAV ^{*1}	M9PA ^{*1}	M9PAV ^{*1}	M9PA ^{*1}	○	○	○	○	○		
	Reed auto switch	—	Grommet	No	2-wire	12 V	—	M9BAV ^{*1}	M9BA ^{*1}	M9BAV ^{*1}	M9BA ^{*1}	○	○	○	○	○	IC circuit
					4-wire (NPN)			—	H7NF	—	F79F	●	●	●	○	○	
Diagnostic indication (2-color indicator)		Grommet	Yes	3-wire (NPN equivalent)	5 V	—	A96V	A96	A96V	A96	●	—	●	—	—	IC circuit	
				2-wire			—	A72H	—	A72H	●	—	●	—	—		
—		Grommet	No	2-wire	24 V	—	100 V	A93V ^{*2}	A93	A93V ^{*2}	A93	●	●	●	—	IC circuit	
							100 V or less	A90V	A90	A90V	A90	●	●	●	—		—
—		Connector	No	2-wire	24 V	—	24 V or less	C73C	A73C	—	—	●	●	●	—	IC circuit	
							—	C80C	A80C	—	—	●	●	●	—		—
Diagnostic indication (2-color indicator)		Grommet	Yes	2-wire	—	—	—	A79W	—	—	—	●	—	—	—	—	
							—	—	—	—	—	—	—	—	—		—

*1: Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance. Please contact 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 5 m..... Z (Example) M9NWZ
1 m..... M (Example) M9NWM None..... N (Example) H7CN
3 m..... L (Example) M9NWL

*: Since there are other applicable auto switches than listed, refer to page 179 for details.

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

*: The D-A9□/M9□/A7□/A8□/F7□/□ auto switches are shipped together, but not assembled. (For band mounting, only auto switch mounting brackets are assembled before being shipped.)

Air Cylinder: Built-in Speed Controller Type Double Acting, Single Rod

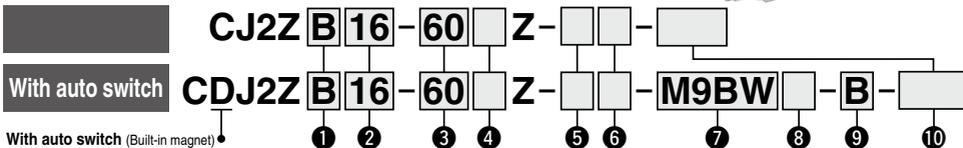
CJ2Z Series

ø10, ø16

RoHS



How to Order



With auto switch (Built-in magnet)

1 Mounting

B	Basic
E	Double-side bossed
D	Double clevis
L	Single foot
M	Double foot
F	Rod flange
G	Head flange

*: Foot/Flange brackets are shipped together with the product, but not assembled.

2 Bore size

10	10 mm
16	16 mm

4 Head cover port location

Nil	Perpendicular to axis	
R	Axial	

*: For double clevis, the product is perpendicular to the cylinder axis.
*: For double-side bossed, the product is perpendicular to the cylinder axis.

3 Cylinder standard stroke [mm]

Refer to "Standard Strokes" on page 138.

5 Pivot bracket

Nil	None
N	Pivot bracket is shipped together with the product.

*: Only for the double clevis type
*: Pivot bracket is shipped together with the product, but not assembled.

6 Rod end bracket

Nil	None
V	Single knuckle joint
W**	Double knuckle joint
T	Rod end cap (Flat type)
U	Rod end cap (Round type)

*: Rod end bracket is shipped together with the product, but not assembled.
**: Refer to page 91 for the double knuckle joint (with one-touch connecting pin).

7 Auto switch

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

*: For applicable auto switches, refer to the table below.
* Enter the auto switch mounting type (A or B) even when a built-in magnet cylinder without an auto switch is required.

8 Number of auto switches

Nil	2 pcs.
S	1 pc.
n	"n" pcs.

9 Auto switch mounting type

A	Rail mounting
B	Band mounting

*: For rail mounting, screws and nuts for 2 auto switches come with the rail.
*: Refer to page 178 for auto switch mounting brackets.

10 Made to Order

Refer to page 138 for details.

*: Refer to "Ordering Example of Cylinder Assembly" on page 138.

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

Type	Special function	Electrical entry	Indicating light	Wiring (Output)	Load voltage		Auto switch model				Lead wire length [m]				Pre-wired connector	Applicable load	
					DC	AC	Band mounting		Rail mounting		0.5 (M)	1 (L)	3 (Z)	5 (N)			None (N)
							Perpendicular	In-line	Perpendicular	In-line							
Solid state auto switch	—	Grommet	No	3-wire (NPN)	5 V, 12 V	—	M9NV	M9N	M9NV	M9N	●	●	●	○	IC circuit		
				3-wire (PNP)			M9PV	M9P	M9PV	M9P	●	●	●	○			
		Connector	No	2-wire	12 V	M9BV	M9B	M9BV	M9B	●	●	○	○	—			
				—		H7C	J79C	—	●	—	●	●	—				
	Diagnostic indication (2-color indicator)	Grommet	Yes	3-wire (NPN)	5 V, 12 V	—	M9NWV	M9NW	M9NWV	M9NW	●	●	●	○	IC circuit		
				3-wire (PNP)			M9PWV	M9PW	M9PWV	M9PW	●	●	●	○			
	Water resistant (2-color indicator)	Grommet	No	2-wire	12 V	—	M9BWV	M9BW	M9BWV	M9BW	●	●	●	○	—		
				3-wire (NPN)			M9NAV ^{*1}	M9NA ^{*1}	M9NAV ^{*1}	M9NA ^{*1}	○	○	●	○		IC circuit	
		Connector	No	3-wire (PNP)	5 V, 12 V	—	M9PAV ^{*1}	M9PA ^{*1}	M9PAV ^{*1}	M9PA ^{*1}	○	○	●	○	—		
				2-wire			M9BAV ^{*1}	M9BA ^{*1}	M9BAV ^{*1}	M9BA ^{*1}	○	○	●	○			
Reed auto switch	—	Grommet	Yes	3-wire (NPN equivalent)	5 V	—	A96V	A96	A96V	A96	●	●	—	—	IC circuit		
				—			200 V	—	A72	A72H	●	●	—	—			
				—			100 V	A93V ^{*2}	A93	A93V ^{*2}	A93	●	●	●		—	
		Connector	No	2-wire	24 V	12 V	—	100 V or less	A90V	A90	A90V	A90	●	●	—	—	IC circuit
								24 V or less	—	C73C	A73C	—	●	●	—	—	
								—	—	C80C	A80C	—	●	●	●	—	
Diagnostic indication (2-color indicator)	Grommet	Yes	—	—	—	—	H7NF	—	F79F	●	●	○	○	IC circuit			
			—	—	—	—	—	A79W	—	—	—	—	—		—		

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

Please contact 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 5 m..... Z (Example) M9NWZ
1 m..... M (Example) M9NWM None..... N (Example) H7CN
3 m..... L (Example) M9NWL

*: Since there are other applicable auto switches than listed, refer to page 179 for details.

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

*: The D-A9□/M9□/A7□/A8□/F7□/□ auto switches are shipped together, but not assembled. (For band mounting, only auto switch mounting brackets are assembled before being shipped.)

Air Cylinder: Built-in Speed Controller Type Double Acting, Double Rod

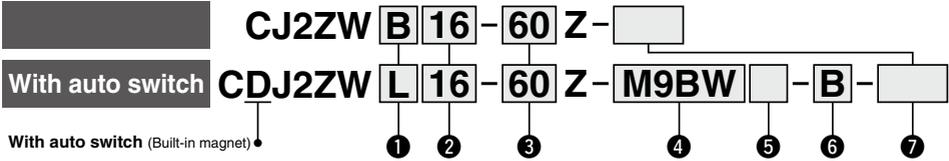
CJ2ZW Series

RoHS

ø10, ø16



How to Order



1 Mounting

B	Basic
L	Foot
F	Flange

*: Foot/Flange brackets are shipped together with the product, but not assembled.

4 Auto switch

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

*: For applicable auto switches, refer to the table below.

★ Enter the auto switch mounting type (A or B) even when a built-in magnet cylinder without an auto switch is required.

2 Bore size

10	10 mm
16	16 mm

3 Cylinder standard stroke [mm]

Refer to "Standard Strokes" on page 145.

5 Number of auto switches

Nil	2 pcs.
S	1 pc.
n	"n" pcs.

6 Auto switch mounting type

A	Rail mounting
B	Band mounting

*: For rail mounting, screws and nuts for 2 auto switches come with the rail.

*: Refer to page 178 for auto switch mounting brackets.

7 Made to Order

Refer to page 145 for details.

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	Band mounting		Rail mounting		0.5 (Nil)	1 (M)	3 (L)	5 (Z)	None (N)			
							Perpendicular	In-line	Perpendicular	In-line								
Solid state auto switch	—	Grommet	No	3-wire (NPN)	5 V, 12 V	—	M9NV	M9N	M9NV	M9N	●	●	○	—	○	IC circuit	Relay, PLC	
				3-wire (PNP)			M9PV	M9P	M9PV	M9P	●	●	○	—	○			
		Connector	2-wire	M9BV	M9B	M9BV	M9B	●	●	○	—	○						
			—	H7C	J79C	—	—	●	—	●	●	—	—					
	Diagnostic indication (2-color indicator)	Grommet	Yes	3-wire (NPN)	5 V, 12 V	—	M9NWV	M9NW	M9NWV	M9NW	●	●	○	—	○	IC circuit		
				3-wire (PNP)			M9PWV	M9PW	M9PWV	M9PW	●	●	○	—	○			
	Water resistant (2-color indicator)	Grommet	No	2-wire	12 V	—	M9BWV	M9BW	M9BWV	M9BW	●	●	○	—	○	—		
				3-wire (NPN)			M9NAV ^{*1}	M9NA ^{*1}	M9NAV ^{*1}	M9NA ^{*1}	○	○	○	—	○			
	With diagnostic output (2-color indicator)	Grommet	Yes	3-wire (PNP)	5 V, 12 V	—	M9PAV ^{*1}	M9PA ^{*1}	M9PAV ^{*1}	M9PA ^{*1}	○	○	●	○	○	IC circuit		
				2-wire			M9BAV ^{*1}	M9BA ^{*1}	M9BAV ^{*1}	M9BA ^{*1}	○	○	●	○	○			
Reed auto switch	—	Grommet	Yes	4-wire (NPN)	5 V, 12 V	—	—	H7NF	—	F79F	●	—	●	○	○	IC circuit		
				3-wire (NPN equivalent)			A96V	A96	A96V	A96	●	—	●	—	—		—	
		Connector	No	2-wire	24 V	—	—	200 V	—	A72	A72H	●	—	●	—	—	—	
							—	100 V	A93V ^{*2}	A93	A93V ^{*2}	A93	●	●	●	—		—
	Diagnostic indication (2-color indicator)	Grommet	Yes	2-wire	24 V	—	100 V or less	A90V	A90	A90V	A90	●	—	●	—	—	IC circuit	
							—	—	C73C	A73C	—	—	●	—	●	●		—
							24 V or less	—	C80C	A80C	—	—	●	—	●	●		—
							—	—	A79W	—	—	—	●	—	●	—		—

*1: Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance. Please contact 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) M9NWM
 3 m..... L (Example) M9NWL
 5 m..... Z (Example) M9NZ
 None..... N (Example) H7CN

*: Since there are other applicable auto switches than listed, refer to page 179 for details.

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

*: The D-A9C/M9/A7C/A80C/F7C/J7C auto switches are shipped together, but not assembled. (For band mounting, only auto switch mounting brackets are assembled before being shipped.)

Air Cylinder: Direct Mount Type Double Acting, Single Rod

CJ2R Series

ø10, ø16



How to Order

CJ2RA 16 - 60 □ Z - □ - □

With auto switch

CDJ2RA 16 - 60 □ Z - □ - M9BW □ - B - □

With auto switch (Built-in magnet)

1 Mounting

A	Bottom mounting
---	-----------------

2 Bore size

10	10 mm
16	16 mm

3 Cylinder standard stroke [mm]

Refer to "Standard Strokes" on page 150.

4 Head cover port location

Nil	Perpendicular to axis	
	R	Axial

5 Rod end bracket

Nil	None
V	Single knuckle joint
W**	Double knuckle joint
T	Rod end cap (Flat type)
U	Rod end cap (Round type)

*: Rod end bracket is shipped together with the product, but not assembled.

** : Refer to page 91 for the double knuckle joint (with one-touch connecting pin).

6 Auto switch

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

*: For applicable auto switches, refer to the table below.

* Enter the auto switch mounting type (A or B) even when a built-in magnet cylinder without an auto switch is required.

7 Number of auto switches

Nil	2 pcs.
S	1 pc.
n	"n" pcs.

8 Auto switch mounting type

A	Rail mounting
B	Band mounting

*: For rail mounting, screws and nuts for 2 auto switches come with the rail.

** : Refer to page 178 for auto switch mounting brackets.

9 Made to Order

Refer to page 150 for details.

*: Refer to "Ordering Example of Cylinder Assembly" on page 150.

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	Band mounting		Rail mounting		0.5 (Nil)	1 (M)	3 (L)	5 (Z)	None (N)			
							Perpendicular	In-line	Perpendicular	In-line								
Solid state auto switch	—	Grommet	No	3-wire (NPN)	5 V, 12 V	—	M9NV	M9N	M9NV	M9N	●	●	●	○	○	IC circuit		
				3-wire (PNP)			M9PV	M9P	M9PV	M9P	●	●	●	○	○			
		Connector	No	2-wire	12 V	—	M9BV	M9B	M9BV	M9B	●	●	●	○	○	—		
				3-wire (NPN)	—	H7C	J79C	—	●	●	●	●	—	—				
	Diagnostic indication (2-color indicator)	Grommet	Yes	3-wire (NPN)	5 V, 12 V	—	M9NWV	M9NW	M9NVV	M9NW	●	●	●	○	○	IC circuit		
				3-wire (PNP)			M9PWV	M9PW	M9PWW	M9PW	●	●	●	○	○			
		Connector	No	2-wire	12 V	—	M9BWW	M9WB	M9BWW	M9WB	●	●	●	○	○	—		
				3-wire (NPN)	—	M9NAV*1	M9NA*1	M9NAV*1	M9NA*1	○	○	○	○	○				
Water resistant (2-color indicator)	Grommet	No	3-wire (PNP)	5 V, 12 V	—	M9PAV*1	M9PA*1	M9PAV*1	M9PA*1	○	○	○	○	○	IC circuit			
			2-wire			12 V	—	M9BAV*1	M9BA*1	M9BAV*1	M9BA*1	○	○	○		○		
	Connector	No	4-wire (NPN)	5 V, 12 V	—	—	H7NF	F79F	—	—	●	●	●	○	IC circuit			
			3-wire (NPN equivalent)	—	5 V	—	A96V	A96	A96V	A96	●	—	●	—		—	IC circuit	
Reed auto switch	—	Grommet	Yes	2-wire	24 V	—	—	200 V	—	A72	A72H	●	●	●	—	—		
							100 V	A93V*2	A93	A93V*2	A93	●	●	●	—		IC circuit	
							100 V or less	A90V	A90	A90V	A90	●	●	●	—			
		Connector	No	No	2-wire	24 V	—	—	—	—	C73C	A73C	—	●	●	●	IC circuit	
									—	—	C80C	A80C	—	●	●	●		IC circuit
									24 V or less	—	—	—	A79W	—	●	●		

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

Please contact 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) M9NW
3 m..... L (Example) M9NWL
5 m..... Z (Example) M9NWZ

*: Since there are other applicable auto switches than listed, refer to page 179 for details.

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

*: The D-A9□/M9□/A7□/A80□/F7□/J7□ auto switches are shipped together, but not assembled. (For band mounting, only auto switch mounting brackets are assembled before being shipped.)

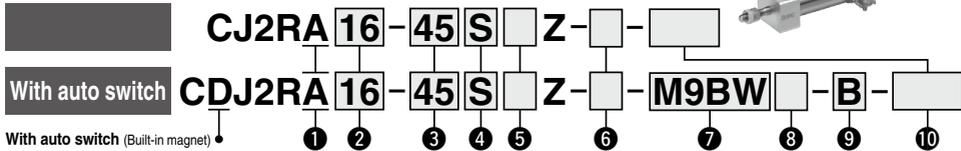
Air Cylinder: Direct Mount Type Single Acting, Spring Return/Extend

CJ2R Series

ø10, ø16



How to Order



1 Mounting

A	Bottom mounting
----------	-----------------

2 Bore size

10	10 mm
16	16 mm

3 Cylinder standard stroke [mm]
Refer to "Standard Strokes" on page 154.

4 Action

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

5 Head cover port location

Nil	Perpendicular to axis	
R	Axial	

6 Rod end bracket

Nil	None
V	Single knuckle joint
W**	Double knuckle joint
T	Rod end cap (Flat type)
U	Rod end cap (Round type)

7 Auto switch

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

8 Number of auto switches

Nil	2 pcs.
S	1 pc.
n	"n" pcs.

** Not applicable to single acting, spring extend (T).

*: Rod end bracket is shipped together with the product, but not assembled.
**: Refer to page 91 for the double knuckle joint (with one-touch connecting pin).

*: For applicable auto switches, refer to the table below.
★ Enter the auto switch mounting type (A or B) even when a built-in magnet cylinder without an auto switch is required.

9 Auto switch mounting type

A	Rail mounting
B	Band mounting

10 Made to Order
Refer to page 154 for details.

*: For rail mounting, screws and nuts for 2 auto switches come with the rail.
*: Refer to page 178 for auto switch mounting brackets.

*: Refer to "Ordering Example of Cylinder Assembly" on page 154.

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	Band mounting		Rail mounting		0.5 (Nil)	1 (M)	3 (L)	5 (Z)	None (N)			
							Perpendicular	In-line	Perpendicular	In-line								
Solid state auto switch	—	Grommet	No	3-wire (NPN)	5 V, 12 V	—	M9NV	M9N	M9NV	M9N	●	●	●	○	—	○	IC circuit	
				3-wire (PNP)			M9PV	M9P	M9PV	M9P	●	●	●	○	—	○		
		Connector	No	2-wire	12 V	—	M9BV	M9B	M9BV	M9B	●	●	●	○	—	○		—
				—	H7C	J79C	—	●	●	●	●	—	—	—				
	Diagnostic indication (2-color indicator)	Grommet	Yes	3-wire (NPN)	5 V, 12 V	—	M9NVV	M9NW	M9NVV	M9NW	●	●	●	○	—	○	IC circuit	
				3-wire (PNP)			M9PWW	M9PW	M9PWW	M9PW	●	●	●	○	—	○		
	Water resistant (2-color indicator)	Grommet	No	2-wire	12 V	—	M9BWW	M9BW	M9BWW	M9BW	●	●	●	○	—	○	—	
				3-wire (NPN)			M9NAV* ¹	M9NA* ¹	M9NAV* ¹	M9NA* ¹	○	○	●	○	—	○		IC circuit
		Connector	No	3-wire (PNP)	5 V, 12 V	—	M9PAV* ¹	M9PA* ¹	M9PAV* ¹	M9PA* ¹	○	○	●	○	—	○	—	
				2-wire	12 V	—	M9BAV* ¹	M9BA* ¹	M9BAV* ¹	M9BA* ¹	○	○	●	○	—	○		
Reed auto switch	—	Grommet	Yes	3-wire (NPN equivalent)	5 V	—	A96V	A96	A96V	A96	●	●	—	—	—	—	IC circuit	
				—			200 V	—	—	A72	A72H	●	●	—	—	—		—
		Connector	No	2-wire	24 V	12 V	—	100 V or less	A93V* ²	A93	A93V* ²	A93	●	●	●	●	—	IC circuit
								—	A90V	A90	A90V	A90	●	●	●	●	—	
	Diagnostic indication (2-color indicator)	Grommet	Yes	No	—	—	—	—	C73C	A73C	—	●	—	●	●	●	—	
								—	C80C	A80C	—	●	—	●	●	●		—
		Connector	No	—	—	—	—	—	—	A79W	—	—	●	—	●	—	—	
									—	—	—	—	●	—	●	—		—

*1: Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance. Please contact 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) M9NWM
 3 m..... L (Example) M9NWL
 5 m..... Z (Example) M9NWX
 None..... N (Example) H7CN
 *: Since there are other applicable auto switches than listed, refer to page 179 for details.
 *: Solid state auto switches marked with "○" are produced upon receipt of order.
 *: The D-A93□/M9□/A7□/A80□/F7□/J7□ auto switches are shipped together, but not assembled. (For band mounting, only auto switch mounting brackets are assembled before being shipped.)

Air Cylinder: Direct Mount, Non-rotating Rod Type Double Acting, Single Rod

CJ2RK Series

ø10, ø16



How to Order

CJ2RKA 16 - 60 [] Z - [] - []

With auto switch

CDJ2RKA 16 - 60 [] Z - [] - M9BW [] - B - []

With auto switch (Built-in magnet)

1 2 3 4 5 6 7 8 9

1 Mounting

A	Bottom mounting
---	-----------------

2 Bore size

10	10 mm
16	16 mm

3 Cylinder standard stroke [mm]

Refer to "Standard Strokes" on page 158.

4 Head cover port location

Nil	Perpendicular to axis	
	Axis	
R	Axis	

5 Rod end bracket

Nil	None
V	Single knuckle joint
W**	Double knuckle joint
T	Rod end cap (Flat type)
U	Rod end cap (Round type)

*: Rod end bracket is shipped together with the product, but not assembled.
**: Refer to page 91 for the double knuckle joint (with one-touch connecting pin).

6 Auto switch

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

*: For applicable auto switches, refer to the table below.

★ Enter the auto switch mounting type (A or B) even when a built-in magnet cylinder without an auto switch is required.

7 Number of auto switches

Nil	2 pcs.
S	1 pc.
n	"n" pcs.

8 Auto switch mounting type

A	Rail mounting
B	Band mounting

*: For rail mounting, screws and nuts for 2 auto switches come with the rail.

*: Refer to page 178 for auto switch mounting brackets.

9 Made to Order

Refer to page 158 for details.

*: Refer to "Ordering Example of Cylinder Assembly" on page 158.

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	Band mounting		Rail mounting		0.5 (Nil)	1 (M)	3 (L)	5 (Z)	None (N)			
							Perpendicular	In-line	Perpendicular	In-line								
Solid state auto switch	—	Grommet	3-wire (NPN)	3-wire (PNP)	5 V, 12 V	—	M9NV	M9N	M9NV	M9N	●	●	●	○	○	IC circuit	Relay, PLC	
							M9PV	M9P	M9PV	M9P	●	●	●	○	○			
		Connector	2-wire	—	—	12 V	—	M9BV	M9B	M9BV	M9B	●	●	●	○	○		—
								—	H7C	J79C	—	●	●	●	●	—		—
	Diagnostic indication (2-color indicator)	Grommet	Yes	3-wire (NPN)	3-wire (PNP)	5 V, 12 V	—	M9NVV	M9NW	M9NVV	M9NW	●	●	●	○	○		IC circuit
								M9PVV	M9PW	M9PVV	M9PW	●	●	●	○	○		—
	Water resistant (2-color indicator)	Grommet	No	3-wire (NPN)	3-wire (PNP)	5 V, 12 V	—	M9BWW	M9BW	M9BWW	M9BW	●	●	●	○	○		—
								M9NAV*1	M9NA*1	M9NAV*1	M9NA*1	○	○	●	○	○		○
	With diagnostic output (2-color indicator)	Grommet	No	3-wire (NPN)	3-wire (PNP)	5 V, 12 V	—	M9PAV*1	M9PA*1	M9PAV*1	M9PA*1	○	○	●	○	○		—
								M9BAV*1	M9BA*1	M9BAV*1	M9BA*1	○	○	●	○	○		—
Reed auto switch	—	Grommet	Yes	3-wire (NPN equivalent)	5 V	—	A96V	A96	A96V	A96	●	—	—	—	—	IC circuit		
							—	—	—	—	—	—	—	—	—	—	—	
		Connector	No	2-wire	24 V	12 V	—	—	—	A72	A72H	●	●	●	—	—	—	
								—	—	A93V*2	A93	A93V*2	A93	●	●	●	—	—
	Diagnostic indication (2-color indicator)	Grommet	Yes	2-wire	24 V	12 V	—	100 V or less	A90V	A90	A90V	A90	●	●	●	—	IC circuit	
								—	—	C73C	A73C	—	—	●	—	●	●	—
	—	Grommet	No	2-wire	24 V	12 V	—	24 V or less	C80C	A80C	—	—	●	●	●	—	IC circuit	
								—	—	A79W	—	—	—	●	—	●	—	—

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

Please contact 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) M9NWM
3 m..... L (Example) M9NWL
5 m..... Z (Example) M9NWX
None..... N (Example) H7CN

*: Since there are other applicable auto switches than listed, refer to page 179 for details.

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

*: The D-A9□/M9□/A7□/A80□/F7□/J7□ auto switches are shipped together, but not assembled. (For band mounting, only auto switch mounting brackets are assembled before being shipped.)

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

CJ2RK Series



ø10, ø16



How to Order

CJ2RKA 16 - 45 S [] Z - [] - []

With auto switch CDJ2RKA 16 - 45 S [] Z - [] - M9BW [] - B - []

With auto switch (Built-in magnet)

1 Mounting

A	Bottom mounting
---	-----------------

2 Bore size

10	10 mm
16	16 mm

3 Cylinder standard stroke [mm]

Refer to "Standard Strokes" on page 161.

4 Action

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

5 Head cover port location

Nil	Perpendicular to axis	
R	Axial	

*: Not applicable to single acting, spring extend (T).

6 Rod end bracket

Nil	None
V	Single knuckle joint
W**	Double knuckle joint
T	Rod end cap (Flat type)
U	Rod end cap (Round type)

*: Rod end bracket is shipped together with the product, but not assembled.
**: Refer to page 91 for the double knuckle joint (with one-touch connecting pin).

7 Auto switch

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

*: For applicable auto switches, refer to the table below.

★ Enter the auto switch mounting type (A or B) even when a built-in magnet cylinder without an auto switch is required.

8 Number of auto switches

Nil	2 pcs.
S	1 pc.
n	"n" pcs.

9 Auto switch mounting type

A	Rail mounting
B	Band mounting

*: For rail mounting, screws and nuts for 2 auto switches come with the rail.

*: Refer to page 178 for auto switch mounting brackets.

10 Made to Order

Refer to page 161 for details.

*: Refer to "Ordering Example of Cylinder Assembly" on page 161.

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	Band mounting		Rail mounting		0.5 (Nil)	1 (M)	3 (L)	5 (Z)	None (N)			
							Perpendicular	In-line	Perpendicular	In-line								
Solid state auto switch	—	Grommet	—	3-wire (NPN)	5 V, 12 V	—	M9NV	M9N	M9NV	M9N	●	●	●	○	○	C circuit	Relay, PLC	
				3-wire (PNP)			M9PV	M9P	M9PV	M9P	●	●	●	○	○			
		Connector	—	2-wire	M9BV	M9B	M9BV	M9B	●	●	●	○	○	○	○			
				—	H7C	J79C	—	●	●	●	●	○	○					
	Diagnostic indication (2-color indicator)	Grommet	Yes	3-wire (NPN)	5 V, 12 V	—	M9NVV	M9NW	M9NVV	M9NW	●	●	●	○	○	C circuit		
				3-wire (PNP)			M9PVV	M9PW	M9PVV	M9PW	●	●	●	○	○	C circuit		
	Water resistant (2-color indicator)	Grommet	—	3-wire (NPN)	5 V, 12 V	—	M9BWW	M9BW	M9BWW	M9BW	●	●	●	○	○	○		○
				3-wire (PNP)			M9NAV ^{*1}	M9NA ^{*1}	M9NAV ^{*1}	M9NA ^{*1}	○	○	○	○	○	○		C circuit
	With diagnostic output (2-color indicator)	Grommet	—	2-wire (PNP)	12 V	—	M9PAV ^{*1}	M9PA ^{*1}	M9PAV ^{*1}	M9PA ^{*1}	○	○	○	○	○	○		○
				3-wire (NPN)			M9BAV ^{*1}	M9BA ^{*1}	M9BAV ^{*1}	M9BA ^{*1}	○	○	○	○	○	○		○
Reed auto switch	—	Grommet	Yes	3-wire (NPN equivalent)	5 V	—	A96V	A96	A96V	A96	●	●	—	—	—	C circuit	Relay, PLC	
				—			200 V	—	—	A72	A72H	●	—	—	—	—		—
		Connector	No	2-wire	24 V	12 V	100 V	A93V ^{*2}	A93	A93V ^{*2}	A93	●	●	●	—	—		—
							100 V or less	A90V	A90	A90V	A90	●	—	●	●	—		—
	Diagnostic indication (2-color indicator)	Grommet	Yes	—	—	24 V or less	—	C73C	A73C	—	●	—	●	●	—	—		C circuit
							—	C80C	A80C	—	●	—	●	●	—	—		—
	—	Grommet	No	—	—	—	—	A79W	—	—	●	—	●	—	—	—		—
							—	—	—	—	●	—	●	—	—	—		—

*1: Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance. Please contact 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) M9NWM
3 m..... L (Example) M9NWL
5 m..... Z (Example) M9NWX
None..... N (Example) H7CN

*: Since there are other applicable auto switches than listed, refer to page 179 for details.

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

*: The D-A9□/M9□/A7□/A8□/F7□/□ auto switches are shipped together, but not assembled. (For band mounting, only auto switch mounting brackets are assembled before being shipped.)