






Compact Cylinder Series *NCQ8*

Bore size: 056 (9/16"), 075 (3/4"), 106 (1-1/16"), 150 (1-1/2"), 200 (2"), 250 (2-1/2")



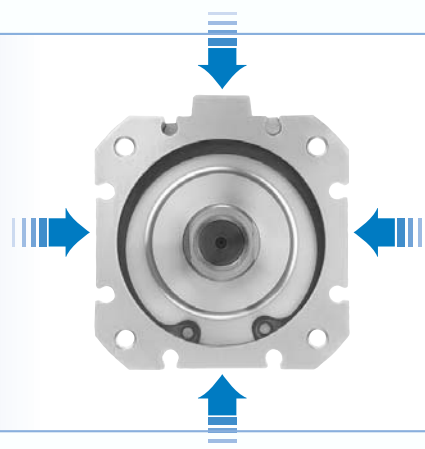
| Standard type | Actuation | Style | Built-in magnet | Rod end male thread | With rubber bumper | Bore size | Standard stroke (inch) | Page |
|---|---------------|------------|-----------------|---------------------|--------------------|--|---|------|
|  | Double acting | Single rod | ○ | ○ | ○ | 056 (9/16") 075 (3/4") 106 (1-1/16") 150 (1-1/2") 200 (2") 250 (2-1/2") | 012 (1/8"), 025 (1/4"), 037 (3/8"), 050 (1/2"), 062 (5/8"), 075 (3/4"), 087 (7/8"), 100 (1"), 125 (1-1/4"), 150 (1-1/2"), 175 (1-3/4"), 200 (2"), 250 (2-1/2"), 300 (3"), 350 (3-1/2"), 400 (4") | 1 |
|  | | Double rod | ○ | ○ | ○ | | | 13 |
|  | Single acting | Single rod | ○ | ○ | | | | 22 |
| | | | | | | | | |
| Super compact | Actuation | Style | Built-in magnet | Rod end male thread | With rubber bumper | Bore size | Standard stroke (inch) | Page |
|  | Double acting | Single rod | ★ | ○ | ○ | 056 (9/16") 075 (3/4") 106 (1-1/16") 150 (1-1/2") 200 (2") 250 (2-1/2") | 025 (1/4"), 037 (3/8"), 050 (1/2"), 062 (5/8"), 075 (3/4"), 087 (7/8"), 100 (1"), 125 (1-1/4"), 150 (1-1/2"), 175 (1-3/4"), 200 (2"), 250 (2-1/2"), 300 (3"), 350 (3-1/2"), 400 (4") | 1 |
|  | Single acting | Single rod | ★ | ○ | | | | 22 |

Note) Built-in magnet type has a minimum stroke of 025 (1/4").

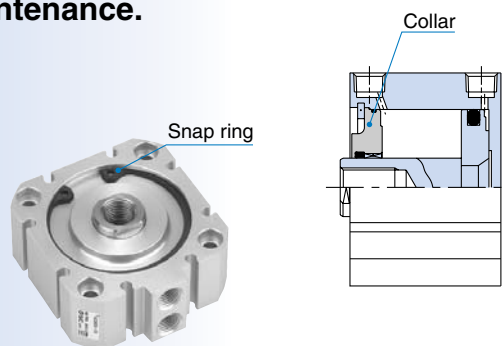
★ Super Compact type is only available with a magnet.

COMPACT CYLINDER

- Square body allows close center to center mounting
- Visibility of auto switch is improved.
- Auto switch mountable on multiple-sides
- No protrusion from cylinder's exterior when mounting auto switches



Snap ring design allows for quick and easy maintenance.
Just by removing the snap ring and collar,
seal replacement is possible.



Super Compact type is available - saves additional space.

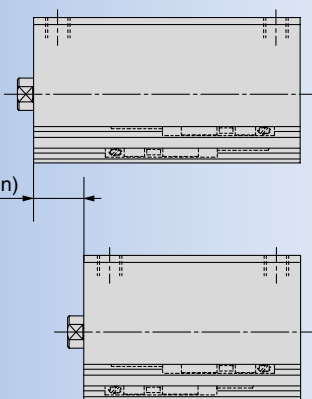
NCDQ8□

With auto switch,
Standard type

Difference in dimension (in)

NCDQ8□Z

With auto switch,
Super compact type



| Bore size | Cylinder tube whole length (in)* | | Difference in dimension (in) |
|---------------|----------------------------------|---------|------------------------------|
| | NCDQ8□ | NCDQ8□Z | |
| 056 (9/16") | 1.44 | 1.06 | 0.38 |
| 075 (3/4") | 1.44 | 1.06 | 0.38 |
| 106 (1-1/16") | 1.75 | 1.25 | 0.50 |
| 150 (1-1/2") | 1.75 | 1.25 | 0.50 |
| 200 (2") | 1.81 | 1.19 | 0.62 |
| 250 (2-1/2") | 2.06 | 1.44 | 0.62 |

*Indicates the dimension for 0 (zero) stroke of double acting, single rod.

Series
NCDQ8



Compact Cylinder Double Acting, Single Rod Series *NCQ8*

Bore size: 056 (9/16"), 075 (3/4"), 106 (1-1/16"), 150 (1-1/2"), 200 (2"), 250 (2-1/2")

How to Order

Without auto switch

NCQ8 B 056 025

With auto switch

NCDQ8 B Z 056 025 M9B S

Built-in magnet

Mounting

| | |
|---|------------------------------|
| B | Through-hole |
| A | Both ends tapped |
| C | Rear clevis |
| E | Front screw clearance hole |
| M | Rear screw clearance hole |
| N | Through screw clearance hole |

Overall length type

| | |
|-----|---------------|
| Nil | Standard |
| Z | Super compact |

Nominal bore size

| | |
|-----|---------|
| 056 | 9/16" |
| 075 | 3/4" |
| 106 | 1-1/16" |
| 150 | 1-1/2" |
| 200 | 2" |
| 250 | 2-1/2" |

Cylinder stroke (in)

| Symbol | Stroke | Symbol | Stroke | Symbol | Stroke | Symbol | Stroke |
|--------|--------|--------|--------|--------|--------|--------|--------|
| 012 | 1/8" | 062 | 5/8" | 125 | 1-1/4" | 250 | 2-1/2" |
| 025 | 1/4" | 075 | 3/4" | 150 | 1-1/2" | 300 | 3" |
| 037 | 3/8" | 087 | 7/8" | 175 | 1-3/4" | 350 | 3-1/2" |
| 050 | 1/2" | 100 | 1" | 200 | 2" | 400 | 4" |

Note 1) With switch is available on strokes 025(1/4") and greater.

X-Option

| | |
|------------------------|--------------|
| Nil | Standard |
| XB6 ^{Note 4)} | High temp. |
| XC4 | With scraper |

Note 4) XB6: Not available with magnet.

*For detailed made to order specifications, refer to page 46.

Number of auto switches

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

Auto switch type

| | |
|-----|--|
| Nil | Without auto switch (Built-in magnet cylinder) |
|-----|--|

*Refer to the table below for auto switch model numbers.

*Auto switches are shipped together, (but not assembled).

Body option

| | |
|-------------------------|---------------------------|
| Nil | Standard (Female rod end) |
| C ^{Note 2, 3)} | Rubber bumper |
| M | Male rod end |

Note 2) Rubber bumper is not available with type "Z" (Super Compact type).

Consult with your SMC sales representative.

Note 3) Stroke will be reduced by 0.06" for rubber bumper type.

*Combination of body options (CM) is available.

Applicable Auto Switches

| Type | Special function | Electrical entry | Indicator/light | Wiring (output) | Load voltage | | | Auto switch model | | Lead wire length (in)* | | | Applicable load | |
|--------------------|---|------------------|-----------------|---------------------|--------------|-----------|-------|-------------------|---------|------------------------|--------------|--------------|-----------------|------------|
| | | | | | DC | | AC | Perpendicular | In-line | 20 (0.5m) (Nil) | 118 (3m) (L) | 197 (5m) (Z) | | |
| Reed switch | — | Grommet | Yes | 3-wire (NPN equiv.) | — | 5 V | — | A96V | A96 | ● | ● | — | IC circuit | — |
| | | | No | 2-wire | 24 V | 5 V, 12 V | 100 V | A90V | A90 | ● | ● | — | IC circuit | Relay, PLC |
| | | | Yes | 2-wire | — | 12 V | — | A93V | A93 | ● | ● | — | — | |
| Solid state switch | — | Grommet | Yes | 3-wire (NPN) | 24 V | 5 V, 12 V | — | M9NV | M9N | ● | ● | ○ | IC circuit | Relay, PLC |
| | | | | 3-wire (PNP) | | 12 V | | M9PV | M9P | ● | ● | ○ | — | |
| | | | | 2-wire | | — | | M9BV | M9B | ● | ● | ○ | — | |
| | | | | 3-wire (NPN) | | 5 V, 12 V | | F9NWV | F9NW | ● | ● | ○ | IC circuit | |
| | | | | 3-wire (PNP) | | — | | F9PWV | F9PW | ● | ● | ○ | — | |
| | Diagnostic indication (2-color display) | Grommet | Yes | 2-wire | | 12 V | | F9BWV | F9BW | ● | ● | ○ | — | |
| | | | | — | | — | | — | F9BA | — | ● | ○ | — | |

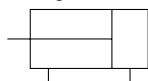
*Lead wire length symbols: 20in (0.5 m) Nil (Example) M9N
118in (3 m) L M9NL
197in (5 m) Z M9NZ

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

Series NCQ8



JIS Symbol
Double acting,
Single rod



Specifications

| | | | | | | |
|-------------------------------|--|------------|---|--------------|----------|--------------|
| Bore size | 056 (9/16") | 075 (3/4") | 106 (1-1/16") | 150 (1-1/2") | 200 (2") | 250 (2-1/2") |
| Piping size | #10-32UNF | #10-32UNF | NPT1/8 | NPT1/8 | NPT1/8 | NPT1/4 |
| Type | Pneumatic (Non-lube) | | | | | |
| Action | Double acting, Single rod | | | | | |
| Fluid | Air | | | | | |
| Proof pressure | 300PSI (2.1MPa) | | | | | |
| Maximum operating pressure | 200PSI (1.4MPa) | | | | | |
| Minimum operating pressure | 056 | | 11PSI (0.07MPa) | | | |
| | 075 to 250 | | 8PSI (0.05MPa) | | | |
| Ambient and fluid temperature | Without auto switch | | 15 to 150°F (−10 to 65°C) (No freezing) | | | |
| | With switch | | 15 to 140°F (−10 to 60°C) (No freezing) | | | |
| Cushion | Rubber bumper | | | | | |
| Rod end thread | Female thread | | | | | |
| Rod end thread tolerance | Class 2 | | | | | |
| Stroke tolerance | 0 to +0.04 in (+1.0mm) | | | | | |
| Mounting | Through-hole (B), Both ends tapped (A), Clevis SCH (E, M, N) | | | | | |
| Piston speed | 2 to 20in/sec (50 to 500mm/s) | | | | | |

* Since a rubber bumper is not available with Z (Total length shorten type), please consult with us separately.

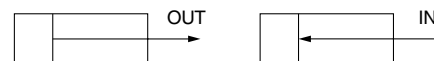
Applicable Stroke

Unit: inch

| Bore size | Standard stroke |
|---------------|---|
| 056 (9/16") | 012 (1/8"), 025 (1/4"), 037 (3/8"), 050 (1/2") 062 (5/8"), 075 (3/4"), 087(7/8"), 100 (1") 125 (1-1/4"), 150(1-1/2"), 175(1-3/4"), 200 (2") 250 (2-1/2"), 300 (3"), 350 (3-1/2"), 400 (4") |
| 075 (3/4") | |
| 106 (1-1/16") | |
| 150 (1-1/2") | |
| 200 (2") | |
| 250 (2-1/2") | |

* With switch is available on strokes 025 (1/4") and greater.

Theoretical Output Table



Unit: lbs

| Bore size (in) | Operating direction | Operating pressure/PSI (MPa) | | | |
|-------------------|------------------------|------------------------------|----------|-----------|-----------|
| | | 45 (0.3) | 75 (0.5) | 145 (1.0) | 200 (1.4) |
| 056 (9/16") | IN | 8.87 | 14.6 | 28.6 | 39.2 |
| | OUT | 11.1 | 18.2 | 35.7 | 48.9 |
| 075 (3/4") | IN | 16.4 | 27.0 | 52.9 | 72.5 |
| | OUT | 19.9 | 32.7 | 64.1 | 87.8 |
| 106 (1-1/16") | IN | 30.8 | 50.8 | 99.5 | 136 |
| | OUT | 39.7 | 65.3 | 128 | 175 |
| 150 (1-1/2") | IN | 65.7 | 108 | 212 | 290 |
| | OUT | 79.5 | 131 | 256 | 351 |
| 200 (2") | IN | 121 | 200 | 391 | 536 |
| | OUT | 141 | 232 | 456 | 624 |
| 250 (2-1/2") | IN | 201 | 330 | 648 | 888 |
| | OUT | 221 | 363 | 712 | 975 |

Weights

Double Acting, Single Rod Without Switch

(OZ)

| Model \ Stroke | 012 (1/8") | 025 (1/4") | 037 (3/8") | 050 (1/2") | 062 (5/8") | 075 (3/4") | 087 (7/8") | 100 (1") | 125 (1-1/4") | 150 (1-1/2") | 175 (1-3/4") | 200 (2") | 250 (2-1/2") | 300 (3") | 350 (3-1/2") | 400 (4") |
|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|-----------------|-----------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|
| NCQ8□056-□ | 0.82 | 0.96 | 1.10 | 1.24 | 1.38 | 1.52 | 1.66 | 1.80 | 2.09 | 2.37 | 2.65 | 2.93 | 3.50 | 4.06 | 4.63 | 5.19 |
| NCQ8□075-□ | 1.24 | 1.45 | 1.66 | 1.86 | 2.07 | 2.28 | 2.49 | 2.70 | 3.11 | 3.53 | 3.94 | 4.36 | 5.19 | 6.03 | 6.86 | 7.69 |
| NCQ8□106-□ | 3.27 | 3.64 | 4.01 | 4.38 | 4.75 | 5.12 | 5.49 | 5.86 | 6.60 | 7.34 | 8.08 | 8.82 | 10.3 | 11.8 | 13.3 | 14.8 |
| NCQ8□150-□ | 5.30 | 5.84 | 6.37 | 6.91 | 7.45 | 7.99 | 8.53 | 9.07 | 10.2 | 11.3 | 12.4 | 13.4 | 15.6 | 17.8 | 19.9 | 22.1 |
| NCQ8□200-□ | 8.89 | 9.69 | 10.5 | 11.3 | 12.1 | 12.9 | 13.7 | 14.5 | 16.1 | 17.7 | 19.3 | 20.8 | 24.0 | 27.2 | 30.4 | 33.5 |
| NCQ8□250-□ | 14.3 | 15.1 | 15.9 | 16.7 | 17.5 | 18.3 | 19.1 | 20.0 | 21.6 | 23.2 | 24.8 | 26.6 | 29.6 | 33.2 | 36.1 | 39.3 |

Double Acting, Single Rod, With Switch

(OZ)

| Model \ Stroke | 012 (1/8") | 025 (1/4") | 037 (3/8") | 050 (1/2") | 062 (5/8") | 075 (3/4") | 087 (7/8") | 100 (1") | 125 (1-1/4") | 150 (1-1/2") | 175 (1-3/4") | 200 (2") | 250 (2-1/2") | 300 (3") | 350 (3-1/2") | 400 (4") |
|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|-----------------|-----------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|
| NCDQ8□056-□ | — | 2.14 | 2.28 | 2.42 | 2.56 | 2.70 | 2.84 | 2.99 | 3.27 | 3.55 | 3.83 | 4.11 | 4.68 | 5.24 | 5.81 | 6.37 |
| NCDQ8□075-□ | — | 3.35 | 3.56 | 3.77 | 3.98 | 4.18 | 4.39 | 4.60 | 5.02 | 5.43 | 5.85 | 6.27 | 7.10 | 7.93 | 8.76 | 9.59 |
| NCDQ8□106-□ | — | 6.99 | 7.36 | 7.73 | 8.10 | 8.47 | 8.84 | 9.21 | 9.95 | 10.7 | 11.5 | 12.2 | 13.7 | 15.2 | 16.7 | 18.1 |
| NCDQ8□150-□ | — | 11.4 | 11.9 | 12.5 | 13.0 | 13.5 | 14.1 | 14.6 | 15.7 | 16.8 | 17.9 | 18.9 | 21.1 | 23.3 | 25.4 | 27.6 |
| NCDQ8□200-□ | — | 17.9 | 18.7 | 19.5 | 20.3 | 21.1 | 21.9 | 22.7 | 24.2 | 25.8 | 27.4 | 29.0 | 32.2 | 35.4 | 38.5 | 41.7 |
| NCDQ8□250-□ | — | 25.3 | 26.1 | 26.9 | 27.7 | 28.5 | 29.3 | 30.1 | 31.8 | 33.4 | 35.0 | 36.6 | 39.9 | 43.1 | 46.4 | 49.6 |

Double Acting, Single Rod, With Switch, Super Compact

(OZ)

| Model \ Stroke | 012 (1/8") | 025 (1/4") | 037 (3/8") | 050 (1/2") | 062 (5/8") | 075 (3/4") | 087 (7/8") | 100 (1") | 125 (1-1/4") | 150 (1-1/2") | 175 (1-3/4") | 200 (2") | 250 (2-1/2") | 300 (3") | 350 (3-1/2") | 400 (4") |
|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|-----------------|-----------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|
| NCDQ8□Z056-□ | — | 1.61 | 1.75 | 1.89 | 2.03 | 2.17 | 2.32 | 2.46 | 2.74 | 3.02 | 3.30 | 3.58 | 4.15 | 4.71 | 5.28 | 5.84 |
| NCDQ8□Z075-□ | — | 2.52 | 2.73 | 2.94 | 3.15 | 3.36 | 3.56 | 3.77 | 4.19 | 4.60 | 5.02 | 5.44 | 6.27 | 7.10 | 7.93 | 8.77 |
| NCDQ8□Z106-□ | — | 5.05 | 5.42 | 5.79 | 6.16 | 6.53 | 6.90 | 7.27 | 8.01 | 8.75 | 9.49 | 10.3 | 11.8 | 13.2 | 14.7 | 16.2 |
| NCDQ8□Z150-□ | — | 8.13 | 8.67 | 9.21 | 9.75 | 10.3 | 10.9 | 11.4 | 12.5 | 13.6 | 14.7 | 15.7 | 17.9 | 20.1 | 22.2 | 24.4 |
| NCDQ8□Z200-□ | — | 12.4 | 13.2 | 14.0 | 14.8 | 15.6 | 16.4 | 17.2 | 18.8 | 20.4 | 22.0 | 23.5 | 26.7 | 29.9 | 33.1 | 36.2 |
| NCDQ8□Z250-□ | — | 18.6 | 19.4 | 20.2 | 21.0 | 21.8 | 22.7 | 23.5 | 25.1 | 26.7 | 28.3 | 30.0 | 33.2 | 36.4 | 39.7 | 42.9 |

Option Weights

Unit: OZ

| Bore size | Clevis |
|---------------|--------|
| 056 (9/16") | 0.71 |
| 075 (3/4") | 0.93 |
| 106 (1-1/16") | 1.64 |
| 150 (1-1/2") | 4.16 |
| 200 (2") | 6.04 |
| 250 (2-1/2") | 8.74 |



Specific Product Precautions

Be sure to read before handling.

For Safety Instructions and Common Precautions, refer to pages 56 through 61.

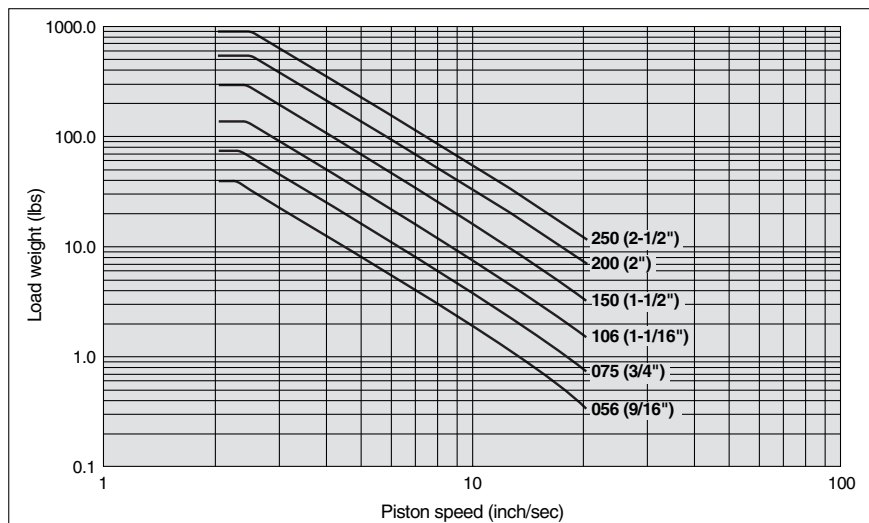
⚠ Caution

Snap Ring Installation/Removal

1. For installation and removal, use an appropriate pair of pliers (Tool for installing a type C snap ring).
2. Even if a proper plier (tool for installing type C snap ring) is used, it is likely to inflict damage to a human body or peripheral equipment, as a

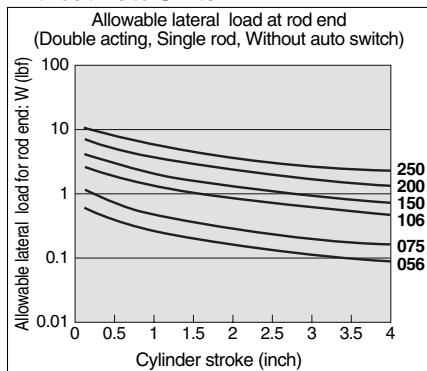
snap ring may be flown out of the tip of a plier (tool for installing a type C snap ring). Be much careful with the popping of a snap ring. Besides, be certain that a snap ring is placed firmly into the groove of rod cover before supplying air at the time of installment. After re-installing the cylinder, make sure that the snap ring is placed securely in the groove before supplying air.

Allowable kinetic energy

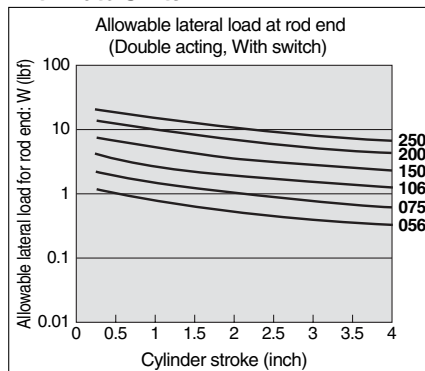


Allowable lateral load at rod end

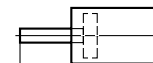
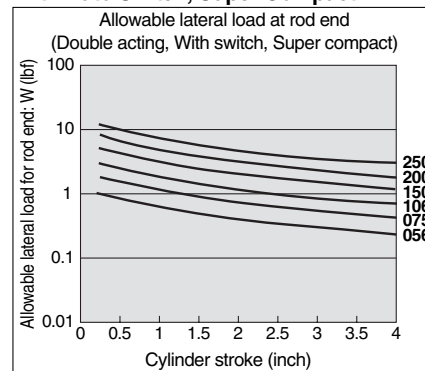
Without Auto Switch



With Auto Switch



With Auto Switch, Super Compact

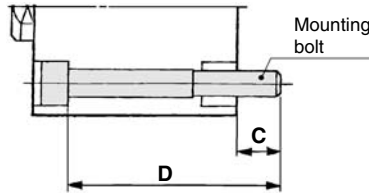


(Mounting orientation: Horizontal)

Compact Cylinder Double Acting, Single Rod **Series NCQ8**

Mounting Bolt

Mounting method: Mounting bolt for through-hole style of NCQ8B is available as an option.



Mounting Bolt Size for NCQ8B056 to 250-□ (Without Auto Switch)

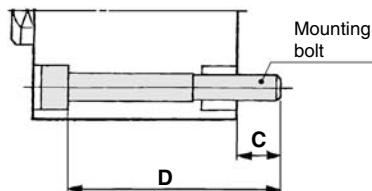
(Inch)

| Model | C | D | Bolt size |
|---------------------|------|-------|-----------------|
| NCQ8B056-012 | 0.18 | 3/4 | #4-40UNC- 3/4 |
| 025 | | 7/8 | 7/8 |
| 037 | | 1 | 1 |
| 050 | | 1-1/8 | 1-1/8 |
| 062 | | 1-1/4 | 1-1/4 |
| 075 | | 1-3/8 | 1-3/8 |
| 087 | | 1-1/2 | 1-1/2 |
| 100 | | 1-5/8 | 1-5/8 |
| 125 | | 1-7/8 | 1-7/8 |
| 150 | | 2-1/8 | 2-1/8 |
| 175 | | 2-3/8 | 2-3/8 |
| 200 | | 2-5/8 | 2-5/8 |
| 250 | | 3-1/8 | 3-1/8 |
| 300 | | 3-5/8 | 3-5/8 |
| 350 | | 4-1/8 | 4-1/8 |
| 400 | | 4-5/8 | 4-5/8 |
| NCQ8B075-012 | 0.21 | 3/4 | #6-32UNC- 3/4 |
| 025 | | 7/8 | 7/8 |
| 037 | | 1 | 1 |
| 050 | | 1-1/8 | 1-1/8 |
| 062 | | 1-1/4 | 1-1/4 |
| 075 | | 1-3/8 | 1-3/8 |
| 087 | | 1-1/2 | 1-1/2 |
| 100 | | 1-5/8 | 1-5/8 |
| 125 | | 1-7/8 | 1-7/8 |
| 150 | | 2-1/8 | 2-1/8 |
| 175 | | 2-3/8 | 2-3/8 |
| 200 | | 2-5/8 | 2-5/8 |
| 250 | | 3-1/8 | 3-1/8 |
| 300 | | 3-5/8 | 3-5/8 |
| 350 | | 4-1/8 | 4-1/8 |
| 400 | | 4-5/8 | 4-5/8 |
| NCQ8B106-012 | 0.27 | 1-1/8 | #6-32UNC- 1-1/8 |
| 025 | | 1-1/4 | 1-1/4 |
| 037 | | 1-3/8 | 1-3/8 |
| 050 | | 1-1/2 | 1-1/2 |
| 062 | | 1-5/8 | 1-5/8 |
| 075 | | 1-3/4 | 1-3/4 |
| 087 | | 1-7/8 | 1-7/8 |
| 100 | | 2 | 2 |
| 125 | | 2-1/4 | 2-1/4 |
| 150 | | 2-1/2 | 2-1/2 |
| 175 | | 2-3/4 | 2-3/4 |
| 200 | | 3 | 3 |
| 250 | | 3-1/2 | 3-1/2 |
| 300 | | 4 | 4 |
| 350 | | 4-1/2 | 4-1/2 |
| 400 | | 5 | 5 |

| Model | C | D | Bolt size |
|---------------------|------|-------|------------------|
| NCQ8B150-012 | 0.33 | 1-1/8 | #10-24UNC- 1-1/8 |
| 025 | | 1-1/4 | 1-1/4 |
| 037 | | 1-3/8 | 1-3/8 |
| 050 | | 1-1/2 | 1-1/2 |
| 062 | | 1-5/8 | 1-5/8 |
| 075 | | 1-3/4 | 1-3/4 |
| 087 | | 1-7/8 | 1-7/8 |
| 100 | | 2 | 2 |
| 125 | | 2-1/4 | 2-1/4 |
| 150 | | 2-1/2 | 2-1/2 |
| 175 | | 2-3/4 | 2-3/4 |
| 200 | | 3 | 3 |
| 250 | | 3-1/2 | 3-1/2 |
| 300 | | 4 | 4 |
| 350 | | 4-1/2 | 4-1/2 |
| 400 | | 5 | 5 |
| NCQ8B200-012 | 0.39 | 1-1/4 | #10-24UNC- 1-1/4 |
| 025 | | 1-3/8 | 1-3/8 |
| 037 | | 1-1/2 | 1-1/2 |
| 050 | | 1-5/8 | 1-5/8 |
| 062 | | 1-3/4 | 1-3/4 |
| 075 | | 1-7/8 | 1-7/8 |
| 087 | | 2 | 2 |
| 100 | | 2-1/8 | 2-1/8 |
| 125 | | 2-3/8 | 2-3/8 |
| 150 | | 2-5/8 | 2-5/8 |
| 175 | | 2-7/8 | 2-7/8 |
| 200 | | 3-1/8 | 3-1/8 |
| 250 | | 3-5/8 | 3-5/8 |
| 300 | | 4-1/8 | 4-1/8 |
| 350 | | 4-5/8 | 4-5/8 |
| 400 | | 5-1/8 | 5-1/8 |
| NCQ8B250-012 | 0.45 | 1-1/2 | 1/4-20UNC- 1-1/2 |
| 025 | | 1-5/8 | 1-5/8 |
| 037 | | 1-3/4 | 1-3/4 |
| 050 | | 1-7/8 | 1-7/8 |
| 062 | | 2 | 2 |
| 075 | | 2-1/8 | 2-1/8 |
| 087 | | 2-1/4 | 2-1/4 |
| 100 | | 2-3/8 | 2-3/8 |
| 125 | | 2-5/8 | 2-5/8 |
| 150 | | 2-7/8 | 2-7/8 |
| 175 | | 3-1/8 | 3-1/8 |
| 200 | | 3-3/8 | 3-3/8 |
| 250 | | 3-7/8 | 3-7/8 |
| 300 | | 4-3/8 | 4-3/8 |
| 350 | | 4-7/8 | 4-7/8 |
| 400 | | 5-3/8 | 5-3/8 |

Mounting Bolt

Mounting method: Mounting bolt for through-hole style of NCQ8 is available as an option.



Mounting Bolt Size for NCDQ8B056 to 250-□ (With Auto Switch)

(Inch)

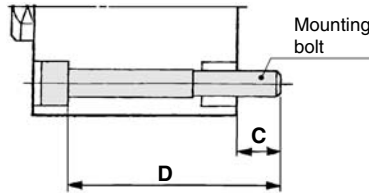
| Model | C | D | Bolt size |
|----------------------|------|-------|----------------|
| NCDQ8B056-025 | 0.18 | 1-3/4 | #4-40UNC-1-3/4 |
| 037 | | 1-7/8 | 1-7/8 |
| 050 | | 2 | 2 |
| 062 | | 2-1/8 | 2-1/8 |
| 075 | | 2-1/4 | 2-1/4 |
| 087 | | 2-3/8 | 2-3/8 |
| 100 | | 2-1/2 | 2-1/2 |
| 125 | | 2-3/4 | 2-3/4 |
| 150 | | 3 | 3 |
| 175 | | 3-1/4 | 3-1/4 |
| 200 | | 3-1/2 | 3-1/2 |
| 250 | | 4 | 4 |
| 300 | 0.21 | 4-1/2 | 4-1/2 |
| 350 | | 5 | 5 |
| 400 | | 5-1/2 | 5-1/2 |
| NCDQ8B075-025 | | 1-3/4 | #6-32UNC-1-3/4 |
| 037 | | 1-7/8 | 1-7/8 |
| 050 | | 2 | 2 |
| 062 | | 2-1/8 | 2-1/8 |
| 075 | | 2-1/4 | 2-1/4 |
| 087 | | 2-3/8 | 2-3/8 |
| 100 | | 2-1/2 | 2-1/2 |
| 125 | | 2-3/4 | 2-3/4 |
| 150 | | 3 | 3 |
| 175 | | 3-1/4 | 3-1/4 |
| 200 | | 3-1/2 | 3-1/2 |
| 250 | | 4 | 4 |
| 300 | | 4-1/2 | 4 1/2 |
| 350 | 0.27 | 5 | 5 |
| 400 | | 5-1/2 | 5-1/2 |
| NCDQ8B106-025 | | 2-1/8 | #6-32UNC-2-1/8 |
| 037 | | 2-1/4 | 2-1/4 |
| 050 | | 2-3/8 | 2-3/8 |
| 062 | | 2-1/2 | 2-1/2 |
| 075 | | 2-5/8 | 2-5/8 |
| 087 | | 2-3/4 | 2-3/4 |
| 100 | | 2-7/8 | 2-7/8 |
| 125 | | 3-1/8 | 3-1/8 |
| 150 | | 3-3/8 | 3-3/8 |
| 175 | | 3-5/8 | 3-5/8 |
| 200 | | 3-7/8 | 3-7/8 |
| 250 | | 4-3/8 | 4-3/8 |
| 300 | | 4-7/8 | 4-7/8 |
| 350 | | 5-3/8 | 5-3/8 |
| 400 | | 5-7/8 | 5-7/8 |

| Model | C | D | Bolt size |
|----------------------|------|-------|-----------------|
| NCDQ8B150-025 | 0.33 | 2-1/8 | #10-24UNC-2-1/8 |
| 037 | | 2-1/4 | 2-1/4 |
| 050 | | 2-3/8 | 2-3/8 |
| 062 | | 2-1/2 | 2-1/2 |
| 075 | | 2-5/8 | 2-5/8 |
| 087 | | 2-3/4 | 2-3/4 |
| 100 | | 2-7/8 | 2-7/8 |
| 125 | | 3-1/8 | 3-1/8 |
| 150 | | 3-3/8 | 3-3/8 |
| 175 | | 3-5/8 | 3-5/8 |
| 200 | | 3-7/8 | 3-7/8 |
| 250 | | 4-3/8 | 4-3/8 |
| 300 | 0.39 | 4-7/8 | 4-7/8 |
| 350 | | 5-3/8 | 5-3/8 |
| 400 | | 5-7/8 | 5-7/8 |
| NCDQ8B200-025 | | 2-1/4 | #10-24UNC-2-1/4 |
| 037 | | 2-3/8 | 2-3/8 |
| 050 | | 2-1/2 | 2-1/2 |
| 062 | | 2-5/8 | 2-5/8 |
| 075 | | 2-3/4 | 2-3/4 |
| 087 | | 2-7/8 | 2-7/8 |
| 100 | | 3 | 3 |
| 125 | | 3-1/4 | 3-1/4 |
| 150 | | 3-1/2 | 3-1/2 |
| 175 | | 3-3/4 | 3-3/4 |
| 200 | | 4 | 4 |
| 250 | | 4-1/2 | 4-1/2 |
| 300 | | 5 | 5 |
| 350 | 0.45 | 5-1/2 | 5-1/2 |
| 400 | | 6 | 6 |
| NCDQ8B250-025 | | 2-1/2 | 1/4-20UNC-2-1/2 |
| 037 | | 2-5/8 | 2-5/8 |
| 050 | | 2-3/4 | 2-3/4 |
| 062 | | 2-7/8 | 2-7/8 |
| 075 | | 3 | 3 |
| 087 | | 3-1/8 | 3-1/8 |
| 100 | | 3-1/4 | 3-1/4 |
| 125 | | 3-1/2 | 3-1/2 |
| 150 | | 3-3/4 | 3-3/4 |
| 175 | | 4 | 4 |
| 200 | | 4-1/4 | 4-1/4 |
| 250 | | 4-3/4 | 4-3/4 |
| 300 | | 5-1/4 | 5-1/4 |
| 350 | | 5-3/4 | 5-3/4 |
| 400 | | 6-1/4 | 6-1/4 |

Compact Cylinder Double Acting, Single Rod **Series NCQ8**

Mounting Bolt

Mounting method: Mounting bolt for through-hole style of NCQ8 is available as an option.



Mounting Bolt size for NCDQ8BZ056 to 250-□ (With Auto Switch)

(Inch)

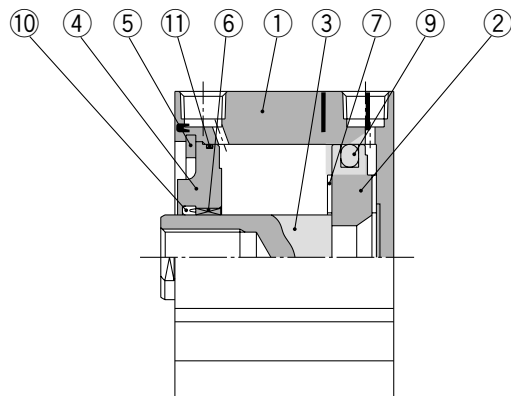
| Model | C | D | Bolt size |
|-----------------------|------|-------|-----------------|
| NCDQ8BZ056-025 | 0.18 | 1-3/8 | #4-40UNC- 1-3/8 |
| 037 | | 1-1/2 | 1-1/2 |
| 050 | | 1-5/8 | 1-5/8 |
| 062 | | 1-3/4 | 1-3/4 |
| 075 | | 1-7/8 | 1-7/8 |
| 087 | | 2 | 2 |
| 100 | | 2-1/8 | 2-1/8 |
| 125 | | 2-3/8 | 2-3/8 |
| 150 | | 2-5/8 | 2-5/8 |
| 175 | | 2-7/8 | 2-7/8 |
| 200 | | 3-1/8 | 3-1/8 |
| 250 | | 3-5/8 | 3-5/8 |
| 300 | | 4-1/8 | 4-1/8 |
| 350 | | 4-5/8 | 4-5/8 |
| 400 | | 5-1/8 | 5-1/8 |
| NCDQ8BZ075-025 | 0.21 | 1-3/8 | #6-32UNC- 1-3/8 |
| 037 | | 1-1/2 | 1-1/2 |
| 050 | | 1-5/8 | 1-5/8 |
| 062 | | 1-3/4 | 1-3/4 |
| 075 | | 1-7/8 | 1-7/8 |
| 087 | | 2 | 2 |
| 100 | | 2-1/8 | 2-1/8 |
| 125 | | 2-3/8 | 2-3/8 |
| 150 | | 2-5/8 | 2-5/8 |
| 175 | | 2-7/8 | 2-7/8 |
| 200 | | 3-1/8 | 3-1/8 |
| 250 | | 3-5/8 | 3-5/8 |
| 300 | | 4-1/8 | 4-1/8 |
| 350 | | 4-5/8 | 4-5/8 |
| 400 | | 5-1/8 | 5-1/8 |
| NCDQ8BZ106-025 | 0.27 | 1-5/8 | #6-32UNC- 1-5/8 |
| 037 | | 1-3/4 | 1-3/4 |
| 050 | | 1-7/8 | 1-7/8 |
| 062 | | 2 | 2 |
| 075 | | 2-1/8 | 2-1/8 |
| 087 | | 2-1/4 | 2-1/4 |
| 100 | | 2-3/8 | 2-3/8 |
| 125 | | 2-5/8 | 2-5/8 |
| 150 | | 2-7/8 | 2-7/8 |
| 175 | | 3-1/8 | 3-1/8 |
| 200 | | 3-3/8 | 3-3/8 |
| 250 | | 3-7/8 | 3-7/8 |
| 300 | | 4 | 4 |
| 350 | | 4-1/2 | 4-1/2 |
| 400 | | 5 | 5 |

| Model | C | D | Bolt size |
|-----------------------|------|-------|------------------|
| NCDQ8BZ150-025 | 0.33 | 1-5/8 | #10-24UNC- 1-5/8 |
| 037 | | 1-3/4 | 1-3/4 |
| 050 | | 1-7/8 | 1-7/8 |
| 062 | | 2 | 2 |
| 075 | | 2-1/8 | 2-1/8 |
| 087 | | 2-1/4 | 2-1/4 |
| 100 | | 2-3/8 | 2-3/8 |
| 125 | | 2-5/8 | 2-5/8 |
| 150 | | 2-7/8 | 2-7/8 |
| 175 | | 3-1/8 | 3-1/8 |
| 200 | | 3-3/8 | 3-3/8 |
| 250 | | 3-7/8 | 3-7/8 |
| 300 | | 4-3/8 | 4-3/8 |
| 350 | | 4-7/8 | 4-7/8 |
| 400 | | 5-3/8 | 5-3/8 |
| NCDQ8BZ200-025 | 0.39 | 1-5/8 | #10-24UNC- 1-5/8 |
| 037 | | 1-3/4 | 1-3/4 |
| 050 | | 1-7/8 | 1-7/8 |
| 062 | | 2 | 2 |
| 075 | | 2-1/8 | 2-1/8 |
| 087 | | 2-1/4 | 2-1/4 |
| 100 | | 2-3/8 | 2-3/8 |
| 125 | | 2-5/8 | 2-5/8 |
| 150 | | 2-7/8 | 2-7/8 |
| 175 | | 3-1/8 | 3-1/8 |
| 200 | | 3-3/8 | 3-3/8 |
| 250 | | 3-7/8 | 3-7/8 |
| 300 | | 4-3/8 | 4-3/8 |
| 350 | | 4-7/8 | 4-7/8 |
| 400 | | 5-3/8 | 5-3/8 |
| NCDQ8BZ250-025 | 0.45 | 1-7/8 | 1/4-20UNC- 1-7/8 |
| 037 | | 2 | 2 |
| 050 | | 2-1/8 | 2-1/8 |
| 062 | | 2-1/4 | 2-1/4 |
| 075 | | 2-3/8 | 2-3/8 |
| 087 | | 2-1/2 | 2-1/2 |
| 100 | | 2-5/8 | 2-5/8 |
| 125 | | 2-7/8 | 2-7/8 |
| 150 | | 3-1/8 | 3-1/8 |
| 175 | | 3-3/8 | 3-3/8 |
| 200 | | 3-5/8 | 3-5/8 |
| 250 | | 4-1/8 | 4-1/8 |
| 300 | | 4-5/8 | 4-5/8 |
| 350 | | 5-1/8 | 5-1/8 |
| 400 | | 5-5/8 | 5-5/8 |

Construction

Without auto switch

Here is the typical, cross-sectional construction. For details for each model, refer to the instruction manual.



Parts List

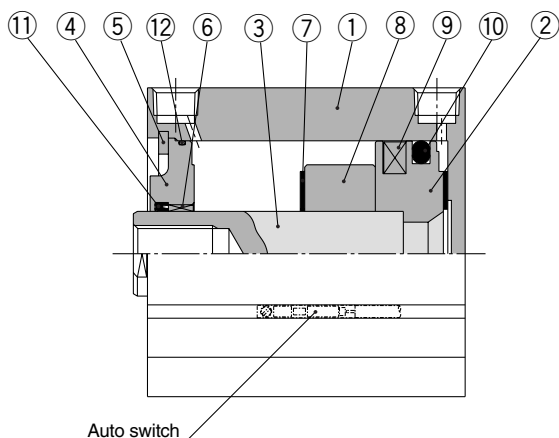
| No. | Description | Material | Remarks |
|-----|---------------|-------------------|-------------------------------|
| 1 | Cylinder tube | Aluminum alloy | Hard anodized |
| 2 | Piston | Aluminum alloy | Chromated |
| 3 | Piston rod | Stainless steel | 056 to 106 |
| | | Carbon steel | 150 to 250 Hard chrome plated |
| 4 | Collar | Aluminum alloy | Anodized |
| 5 | Snap ring | Carbon tool steel | Phosphate coated |

Repair Parts: Standard Seal Kit for Double Acting, Single Rod

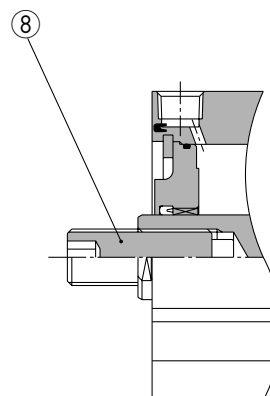
| Bore size | Kit no. | Remarks |
|---------------|-------------|--|
| 056 (9/16") | NCQ8B056-PS | Piston seal, rod seal, and tube gasket are included. |
| 075 (3/4") | NCQ8B075-PS | |
| 106 (1-1/16") | NCQ8B106-PS | |
| 150 (1-1/2") | NCQ8B150-PS | |
| 200 (2") | NCQ8B200-PS | |
| 250 (2-1/2") | NCQ8B250-PS | |

With auto switch

Here is the typical, cross-sectional construction. For details for each model, refer to the instruction manual.



Auto switch



Male thread

| No. | Description | Material | Remarks |
|-----|---------------|-----------------------|---------------------------|
| 6 | Bushing | Phosphor bronze alloy | 200 and 250 only |
| 7 | Rubber bumper | NBR | With rubber bumper only |
| 8 | Stud | Steel alloy | Electroless nickel plated |
| 9 | Piston seal | NBR | |
| 10 | Rod seal | NBR | |
| 11 | Tube gasket | NBR | |

Repair Parts: -XB6 Seal Kit for Double Acting, Single Rod

| Bore size | Kit no. | Remarks |
|---------------|-----------------|--|
| 056 (9/16") | NCQ8B056-XB6-PS | Piston seal, rod seal, and tube gasket are included. |
| 075 (3/4") | NCQ8B075-XB6-PS | |
| 106 (1-1/16") | NCQ8B106-XB6-PS | |
| 150 (1-1/2") | NCQ8B150-XB6-PS | |
| 200 (2") | NCQ8B200-XB6-PS | |
| 250 (2-1/2") | NCQ8B250-XB6-PS | |

Parts List

| No. | Description | Material | Remarks |
|-----|---------------|-----------------------|---------------------------------------|
| 1 | Cylinder tube | Aluminum alloy | Hard anodized |
| 2 | Piston | Aluminum alloy | Chromated |
| 3 | Piston rod | Stainless steel | 056 to 106 |
| | | Carbon steel | 150 to 250 Hard chrome plated |
| 4 | Collar | Aluminum alloy | Anodized |
| 5 | Snap ring | Carbon tool steel | Phosphate coated |
| 6 | Bushing | Phosphor bronze alloy | 200 and 250 only |
| 7 | Rubber bumper | NBR | Use for with rubber bumper only |
| 8 | Spacer | Aluminum alloy | Chromated, Use for standard type only |
| 9 | Magnet | — | |
| 10 | Piston seal | NBR | |
| 11 | Rod seal | NBR | |
| 12 | Tube gasket | NBR | |

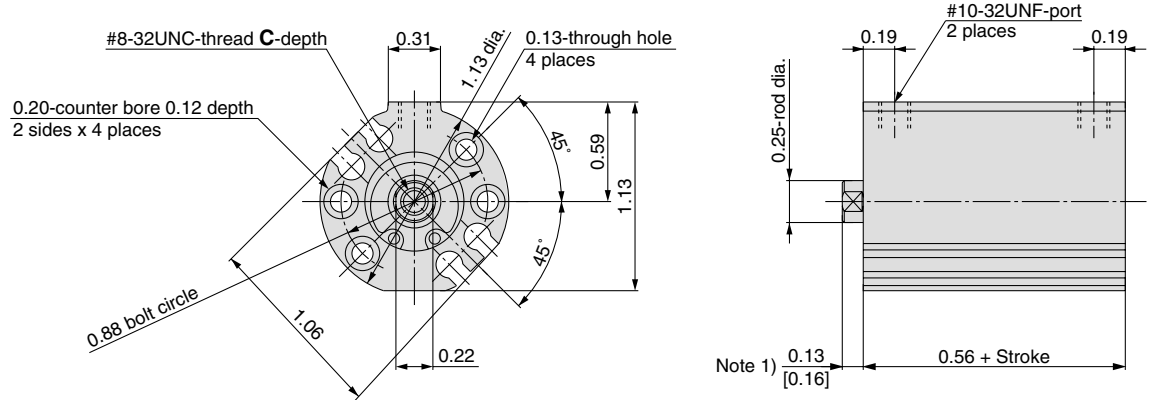
Repair Parts: Seal Kit for Double Acting, Single Rod

The part number will be the same as the one without auto switches.

Compact Cylinder Double Acting, Single Rod **Series NCQ8**

Dimensions/NCQ8B056 to 250 (Refer to page 44 for both ends tapped and male thread dimensions.)

056 (9/16")

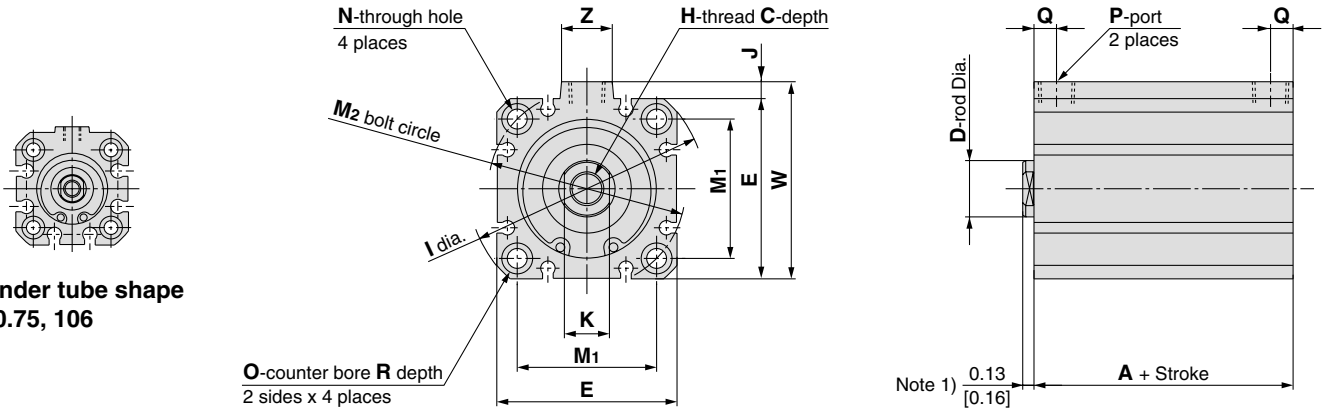


(Inch)

| Symbol | C |
|------------|------|
| Stroke | |
| 1/8" | 0.36 |
| 1/4" to 4" | 0.46 |

Note 1) According to the rubber bumper type, its stroke is reduced by 0.06" and the projection of a piston rod is 0.16".

075 (3/4"), 106 (1-1/16"), 150 (1-1/2"), 200 (2"), 250 (2-1/2")



**Cylinder tube shape
for 0.75, 106**

(Inch)

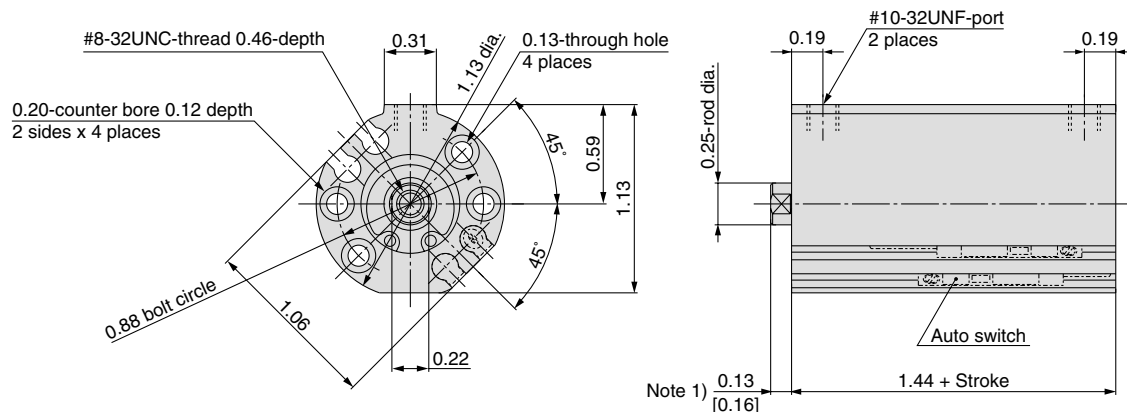
| Symbol Bore | A | C | | | D | E | H | I | J | K | M1 | M2 | N | O | P | Q | R | W | Z |
|----------------------|------|--------|--------|--------------|------|------|------------|------|------|------|------|------|------|------|-----------|------|------|------|------|
| | | 1/8"st | 1/4"st | 3/8" to 4"st | | | | | | | | | | | | | | | |
| 075 (3/4") | 0.56 | 0.36 | 0.46 | | 0.31 | 1.25 | #10-32UNF | 1.56 | 0.06 | 0.25 | 0.86 | 1.22 | 0.15 | 0.25 | #10-32UNF | 0.19 | 0.15 | 1.31 | 0.38 |
| 106 (1-1/16") | 0.88 | 0.52 | 0.70 | | 0.50 | 1.56 | 5/16-24UNF | 2.03 | 0.16 | 0.44 | 1.19 | 1.69 | 0.15 | 0.25 | NPT1/8 | 0.25 | 0.15 | 1.72 | 0.56 |
| 150 (1-1/2") | 0.88 | 0.50 | 0.70 | | 0.63 | 2.00 | 3/8-24UNF | 2.63 | 0.19 | 0.50 | 1.55 | 2.19 | 0.22 | 0.34 | NPT1/8 | 0.25 | 0.20 | 2.19 | 0.56 |
| 200 (2") | 0.94 | 0.44 | 0.70 | | 0.75 | 2.53 | 1/2-20UNF | 3.13 | 0.20 | 0.63 | 1.90 | 2.69 | 0.22 | 0.34 | NPT1/8 | 0.25 | 0.20 | 2.73 | 0.56 |
| 250 (2-1/2") | 1.19 | 0.44 | 0.70 | | 0.75 | 2.84 | 1/2-20UNF | 3.75 | 0.39 | 0.63 | 2.30 | 3.25 | 0.28 | 0.41 | NPT1/4 | 0.33 | 0.26 | 3.23 | 0.69 |

Note 1) According to the rubber bumper type, its stroke is reduced by 0.06" and the projection of a piston rod is 0.16".

Series NCQ8

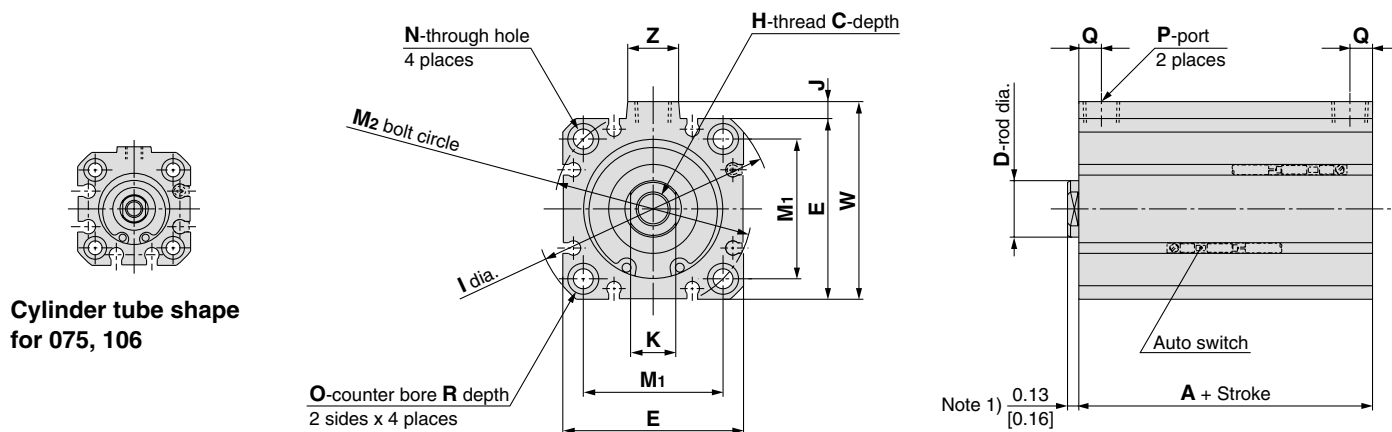
Dimensions/NCQ8B056 to 250 (Refer to page 44 for both ends tapped and male thread dimensions.)

056 (9/16")



Note 1) According to the rubber bumper type, its stroke is reduced by 0.06" and the projection of a piston rod is 0.16.

075 (3/4"), 106 (1-1/16"), 150 (1-1/2"), 200 (2"), 250 (2-1/2")



Cylinder tube shape
for 075, 106

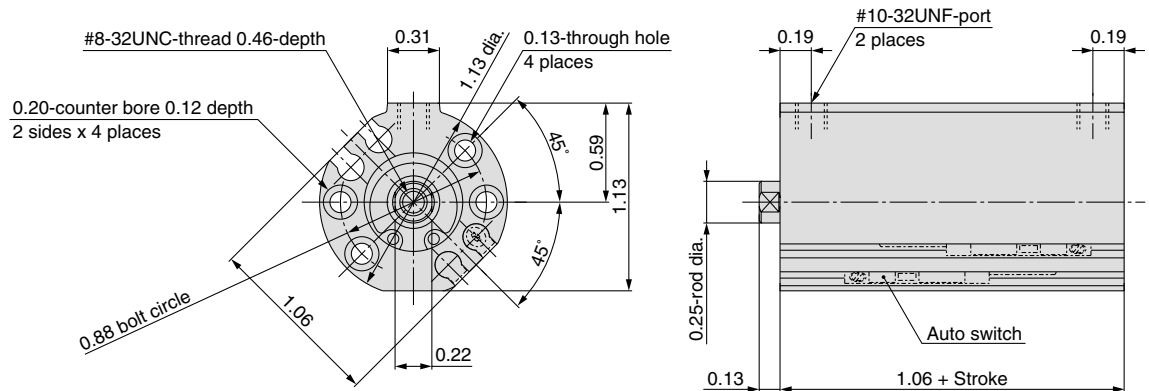
| Symbol | A | C | D | E | H | I | J | K | M ₁ | M ₂ | N | O | P | Q | R | W | Z |
|---------------|------|------|------|------|------------|------|------|------|----------------|----------------|------|------|-----------|------|------|------|------|
| Bore | | | | | | | | | | | | | | | | | |
| 075 (3/4") | 1.44 | 0.46 | 0.31 | 1.25 | #10-32UNF | 1.56 | 0.06 | 0.25 | 0.86 | 1.22 | 0.15 | 0.25 | #10-32UNF | 0.19 | 0.15 | 1.31 | 0.38 |
| 106 (1-1/16") | 1.75 | 0.70 | 0.50 | 1.56 | 5/16-24UNF | 2.03 | 0.16 | 0.44 | 1.19 | 1.69 | 0.15 | 0.25 | NPT1/8 | 0.25 | 0.15 | 1.72 | 0.56 |
| 150 (1-1/2") | 1.75 | 0.70 | 0.63 | 2.00 | 3/8-24UNF | 2.63 | 0.19 | 0.50 | 1.55 | 2.19 | 0.22 | 0.34 | NPT1/8 | 0.25 | 0.20 | 2.19 | 0.56 |
| 200 (2") | 1.81 | 0.70 | 0.75 | 2.53 | 1/2-20UNF | 3.13 | 0.20 | 0.63 | 1.90 | 2.69 | 0.22 | 0.34 | NPT1/8 | 0.25 | 0.20 | 2.73 | 0.56 |
| 250 (2-1/2") | 2.06 | 0.70 | 0.75 | 2.84 | 1/2-20UNF | 3.75 | 0.39 | 0.63 | 2.30 | 3.25 | 0.28 | 0.41 | NPT1/4 | 0.33 | 0.26 | 3.23 | 0.69 |

Note 1) According to the rubber bumper type, its stroke is reduced by 0.06" and the projection of a piston rod is 0.16".

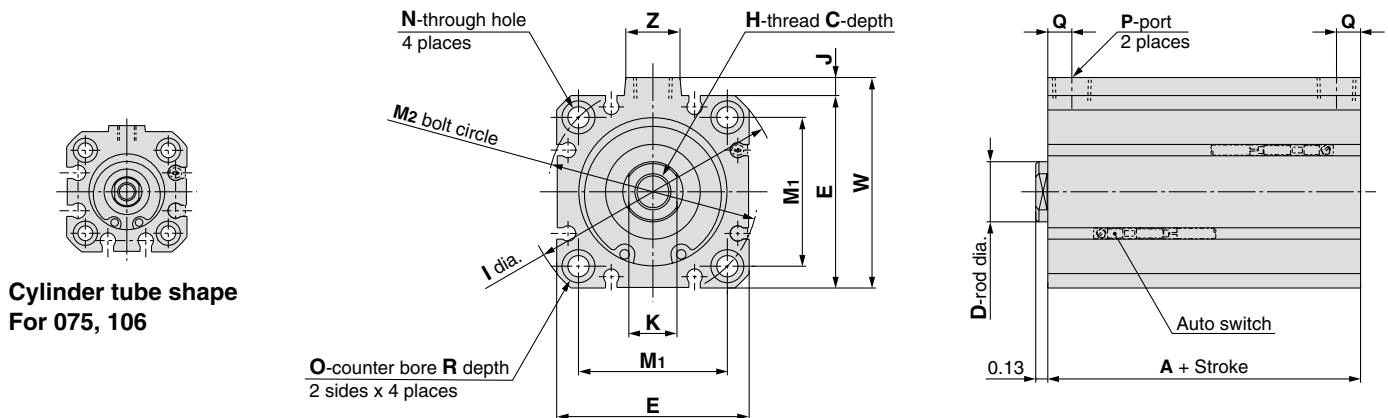
Compact Cylinder Double Acting, Single Rod **Series NCQ8**

Dimensions/NCQ8BZ056 to 250 (Refer to page 44 for both ends tapped and male thread dimensions.)

056 (9/16")



075 (3/4"), 106 (1-1/16"), 150 (1-1/2"), 200 (2"), 250 (2-1/2")



**Cylinder tube shape
For 075, 106**

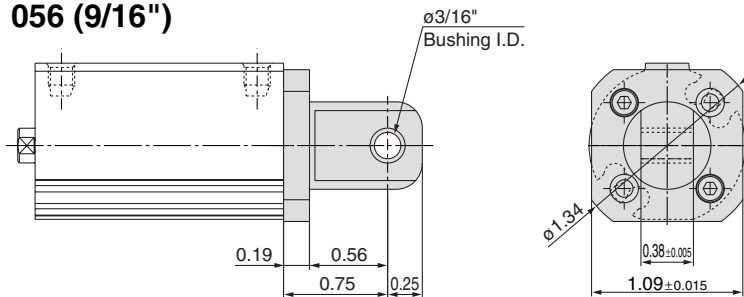
| Symbol Bore | A | C | | D | E | H | I | J | K | M ₁ | M ₂ | N | O | P | Q | R | W | Z |
|----------------------|------|--------|--------------|------|------|------------|------|------|------|----------------|----------------|------|------|-----------|------|------|------|------|
| | | 1/4"st | 3/8" to 4"st | | | | | | | | | | | | | | | |
| 075 (3/4") | 1.06 | 0.46 | | 0.31 | 1.25 | #10-32UNF | 1.56 | 0.06 | 0.25 | 0.86 | 1.22 | 0.15 | 0.25 | #10-32UNF | 0.19 | 0.15 | 1.31 | 0.38 |
| 106 (1-1/16") | 1.25 | 0.52 | 0.70 | 0.50 | 1.56 | 5/16-24UNF | 2.03 | 0.16 | 0.44 | 1.19 | 1.69 | 0.15 | 0.25 | NPT1/8 | 0.25 | 0.15 | 1.72 | 0.56 |
| 150 (1-1/2") | 1.25 | 0.50 | 0.70 | 0.63 | 2.00 | 3/8-24UNF | 2.63 | 0.19 | 0.50 | 1.55 | 2.19 | 0.22 | 0.34 | NPT1/8 | 0.25 | 0.20 | 2.19 | 0.56 |
| 200 (2") | 1.19 | 0.70 | | 0.75 | 2.53 | 1/2-20UNF | 3.13 | 0.20 | 0.63 | 1.90 | 2.69 | 0.22 | 0.34 | NPT1/8 | 0.25 | 0.20 | 2.73 | 0.56 |
| 250 (2-1/2") | 1.44 | 0.70 | | 0.75 | 2.84 | 1/2-20UNF | 3.75 | 0.39 | 0.63 | 2.30 | 3.25 | 0.28 | 0.41 | NPT1/4 | 0.33 | 0.26 | 3.23 | 0.69 |

(Inch)

Series NCQ8

Dimensions/NC(D)Q8□(Z)

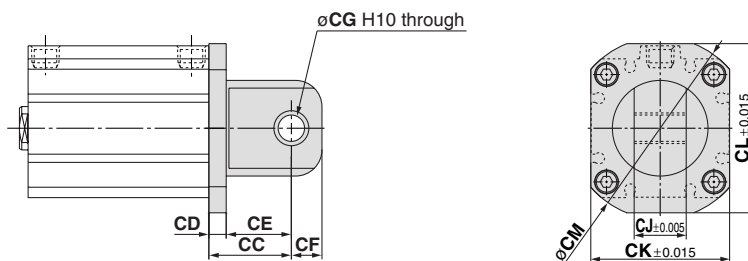
Rear clevis / NC(D)Q8C(Z) 056 (9/16")



(Inch)

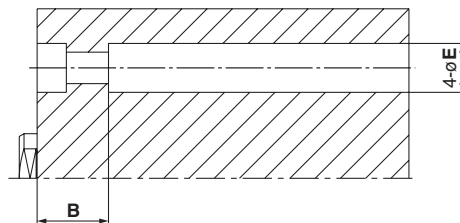
| Symbol | CC | CD | CE | CF | CG | CJ |
|---------------|------|------|------|------|------|------|
| Bore | | | | | | |
| 075 (3/4") | 0.75 | 0.19 | 0.56 | 0.25 | 3/16 | 0.38 |
| 106 (1-1/16") | 0.81 | 0.25 | 0.56 | 0.25 | 3/16 | 0.38 |
| 150 (1-1/2") | 1.19 | 0.25 | 0.94 | 0.44 | 3/8 | 0.75 |
| 200 (2") | 1.25 | 0.31 | 0.94 | 0.44 | 3/8 | 0.75 |
| 250 (2-1/2") | 1.31 | 0.38 | 0.93 | 0.44 | 3/8 | 0.75 |

075 (3/4"), 106 (1-1/16"), 150 (1-1/2"), 200 (2"), 250 (2-1/2")



| Symbol | CK | CL | CM |
|---------------|------|------|------|
| Bore | | | |
| 075 (3/4") | 1.25 | 1.47 | 1.56 |
| 106 (1-1/16") | 1.56 | 1.94 | 2.03 |
| 150 (1-1/2") | 2.00 | 2.44 | 2.62 |
| 200 (2") | 1.90 | 3.00 | 3.13 |
| 250 (2-1/2") | 2.30 | 3.62 | 3.74 |

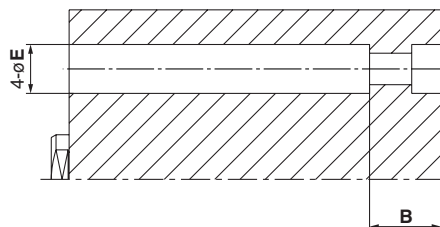
Front screw clearance hole / NC(D)Q8E(Z)



(Inch)

| Symbol | B | E |
|---------------|------|------|
| Bore | | |
| 056 (9/16") | 0.34 | 0.20 |
| 075 (3/4") | 0.34 | 0.25 |
| 106 (1-1/16") | 0.50 | 0.25 |
| 150 (1-1/2") | 0.50 | 0.34 |
| 200 (2") | 0.53 | 0.34 |
| 250 (2-1/2") | 0.66 | 0.41 |

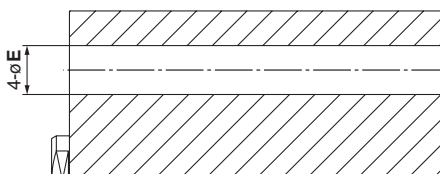
Rear screw clearance hole / NC(D)Q8M(Z)



(Inch)

| Symbol | B | E |
|---------------|------|------|
| Bore | | |
| 056 (9/16") | 0.34 | 0.20 |
| 075 (3/4") | 0.34 | 0.25 |
| 106 (1-1/16") | 0.50 | 0.25 |
| 150 (1-1/2") | 0.50 | 0.34 |
| 200 (2") | 0.53 | 0.34 |
| 250 (2-1/2") | 0.66 | 0.41 |

Through screw clearance hole / NC(D)Q8N(Z)



(Inch)

| Symbol | E |
|---------------|------|
| Bore | |
| 056 (9/16") | 0.20 |
| 075 (3/4") | 0.25 |
| 106 (1-1/16") | 0.25 |
| 150 (1-1/2") | 0.34 |
| 200 (2") | 0.34 |
| 250 (2-1/2") | 0.41 |