

# NFPA Interchangeable Cylinder: Standard Type Double Acting, Single Rod (Medium Duty) Series *NCA1*

Inch size:  $\varnothing 1.5"$ ,  $\varnothing 2"$ ,  $\varnothing 2.5"$ ,  $\varnothing 3.25"$ ,  $\varnothing 4"$

## How to Order

**NC** **D** **A1** **B** **150** **04** **00** **A54** **XB5**

**Built-in magnet** ●

|     |                                  |
|-----|----------------------------------|
| Nil | None                             |
| D   | W/ auto switch (Magnetic piston) |

**Style** ●

|     |                       |
|-----|-----------------------|
| Nil | Standard cylinder     |
| K   | Non-rotating cylinder |
| W   | Double rod            |
| M   | Male rod stud         |

**Mounting style** ●

|   |     |                                          |
|---|-----|------------------------------------------|
| B | MX0 | Basic style                              |
| L | MS1 | Foot style                               |
| F | MF1 | Rod side flange style                    |
| G | MF2 | Head side flange style                   |
| R | MS4 | Side tapped style                        |
| D | MP2 | Double detachable head side clevis style |
| T | MT4 | Center trunnion style                    |
| C | MP4 | Single detachable head side clevis style |
| X | MP1 | Double head side clevis style            |
| S | MS2 | Side lug style                           |
| U | MT1 | Rod side trunnion style                  |
| J | MT2 | Head side trunnion style                 |

**Bore size** ●

|     |       |
|-----|-------|
| 150 | 1.5"  |
| 200 | 2"    |
| 250 | 2.5"  |
| 325 | 3.25" |
| 400 | 4"    |

For larger bore sizes up to 32" bore. Please consult CAT: N304-EX.

**Standard stroke** ●

Inches

**Stroke** ●

Hundredths of an inch

**Rod boot**

|     |          |
|-----|----------|
| Nil | None     |
| J   | Nylon    |
| K   | Neoprene |

**Air cushion**

|     |           |
|-----|-----------|
| Nil | Both ends |
| N   | None      |
| H   | Head end  |
| R   | Rod end   |

**Option**

|       |                            |
|-------|----------------------------|
| -XB5  | Oversized rod              |
| -XB6  | High temperature           |
| -XB7  | Low temperature            |
| -XB9  | Low speed                  |
| -XC6  | Stainless steel piston rod |
| -XC8  | Adjustable stroke/Extend   |
| -XC9  | Adjustable stroke/Return   |
| -XC10 | Dual operation/Double rod  |
| -XC11 | Dual operation/Single rod  |
| -XC22 | Fluoro rubber seals        |
| -XC35 | With coil scraper          |

For special rod end modifications, please see page 6-15-33.

**Number of auto switches**

|     |          |
|-----|----------|
| Nil | 2 pcs.   |
| S   | 1 pcs.   |
| 3   | 3 pcs.   |
| n   | "n" pcs. |

**Auto switch**

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

\* For the applicable auto switch model, refer to the table on page 6-15-7.  
\* Auto switches are shipped together, (but not assembled.)

## Mounting Bracket Part No.

| Mounting bracket / Bore size | Part no.   |           |            |             |           |
|------------------------------|------------|-----------|------------|-------------|-----------|
|                              | 150 (1.5") | 200 (2")  | 250 (2.5") | 325 (3.25") | 400 (4")  |
| Foot *                       | NCA1-L150  | NCA1-L200 | NCA1-L250  | NCA1-L325   | NCA1-L400 |
| Flange                       | NCA1-F150  | NCA1-F200 | NCA1-F250  | NCA1-F325   | NCA1-F400 |
| Double clevis (MP2)          | NCA1-D150  | NCA1-D200 | NCA1-D250  | NCA1-D325   | NCA1-D400 |
| Single clevis                | NCA1-C150  | NCA1-C200 | NCA1-C250  | NCA1-C325   | NCA1-C400 |
| Side lug *                   | NCA1-S150  | NCA1-S200 | NCA1-S250  | NCA1-S325   | NCA1-S400 |
| Double clevis (MP1)          | NCA1-X150  | NCA1-X200 | NCA1-X250  | NCA1-X325   | NCA1-X400 |

\* These kits are for standard single rod/double acting cylinders without options. For option kits, please contact your local SMC sales office. One kit required per cylinder.



The SMC NCA1 expanded Series NFPA Industrial Interchangeable Pneumatic Cylinders are now available in bore sizes ranging from 5"-8" Medium Duty, and 1.5"-14" Heavy Duty.

The NCA1 Expanded Series Cylinders offer:

- Replaceable Rod Gland
- A full range of NFPA interchangeable mounting configurations.
- Available in three construction types: Aluminum, Steel, and Stainless steel
- Composite fiber tube optional.
- Fully adjustable cushion

For further information, please consult CAT: N304-EX or contact your local SMC sales office.

## Specifications



| Type                        | Standard                                                                                                                                                                                                                  | Double rod                                                                                                              | Non-rotating rod                                                                                                                                                    |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fluid                       | Air                                                                                                                                                                                                                       | Air                                                                                                                     | Air                                                                                                                                                                 |
| Lubrication                 | Non-lube                                                                                                                                                                                                                  | Non-lube                                                                                                                | Non-lube                                                                                                                                                            |
| Max. operating pressure     | 250 psi (1.75 MPa)                                                                                                                                                                                                        | 250 psi (1.75 MPa)                                                                                                      | 250 psi (1.75 MPa) *                                                                                                                                                |
| Min. operating pressure     | 8 psi (0.06 MPa)                                                                                                                                                                                                          | 8 psi (0.06 MPa)                                                                                                        | 15 psi (0.1 MPa)                                                                                                                                                    |
| Ambient & fluid temperature | 40 to 140°F (5 to 60°C)                                                                                                                                                                                                   | 40 to 140°F (5 to 60°C)                                                                                                 | 0 to 140°F (5 to 60°C)                                                                                                                                              |
| Piston speed                | 2 to 20 in/s<br>(50 to 500 mm/s)                                                                                                                                                                                          | 2 to 20 in/s<br>(50 to 500 mm/s)                                                                                        | 2 to 20 in/s<br>(50 to 500 mm/s)                                                                                                                                    |
| Cushion                     | Air cushion standard                                                                                                                                                                                                      |                                                                                                                         |                                                                                                                                                                     |
| Mounting                    | Basic style, Foot style,<br>Rod side flange style,<br>Head side flange style,<br>Clevis style,<br>Side tapped style,<br>Center trunnion style,<br>Head side trunnion style,<br>Side lug style,<br>Rod side trunnion style | Basic style,<br>Foot style,<br>Flange style,<br>Center trunnion style,<br>Side tapped style,<br>Rod side trunnion style | Basic style,<br>Foot style,<br>Clevis style,<br>Rod side flange style,<br>Head side flange style,<br>Center trunnion style,<br>Side tapped style,<br>Side lug style |
| Non-rotating accuracy       | N/A                                                                                                                                                                                                                       | N/A                                                                                                                     | N/A                                                                                                                                                                 |

\* Rod and head side trunnion maximum operating pressure for 325 and 400 bore is up to 150 psi.

### Base Material/Surface Treatment

| Description | Material       | Note               |
|-------------|----------------|--------------------|
| Cover       | Aluminum alloy | Silver paint       |
| Tube        | Aluminum alloy | Hard alumite       |
| Seal        | Nitrile rubber | PLD, PLP           |
| Piston rod  | Carbon steel   | Hard chrom plating |
| Piston      | Aluminum alloy | Chromate           |

**To calculate thrust forces not shown in the table, multiply operating pressure by piston area.**

#### How to use this table

1. Locate column with desired operating pressure.
2. Move down that column and locate the thrust value which is equal (or the next larger to the force to be delivered by the cylinder).
3. On that same line, locate in the first (left) column the bore size recommended for your application.

Note) These are guide lines only, which must be substantiated using additional data specific to your application.

**To calculate pull forces not shown in the table, use the following formula:**

$$\text{Pull Force} = (\text{Piston area} - \text{Rod area}) \times \text{Working pressure}$$

#### How to read this table

1. To find the force on the pull stroke, locate the required piston rod diameter in the left most column.
2. Moving to the right, locate the required working pressure.
3. Deduct the value shown at the intersection from the push stroke force value determined from the Push Stroke table. The resultant is the available pull stroke table.

### Standard Stroke

| Bore size (in) | Standard stroke                                      | Maximum stroke           |
|----------------|------------------------------------------------------|--------------------------|
| 1.5"           | 1, 2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20,         |                          |
| 2", 2.5"       | 1, 2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 24      | Please consult with SMC. |
| 3.25", 4"      | 1, 2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 24, 28, |                          |

### Weight/Aluminum Tube

| Bore size (in)                     |                         | 150 (1.5") | 200 (2") | 250 (2.5") | 325 (3.25") | 400 (4") |
|------------------------------------|-------------------------|------------|----------|------------|-------------|----------|
| Basic weight                       | Basic style             | 1.58       | 2.35     | 3.19       | 6.03        | 7.79     |
|                                    | Foot mounting style     | 1.95       | 2.86     | 3.80       | 7.45        | 10.12    |
|                                    | Flange mounting style   | 2.30       | 3.22     | 4.45       | 8.85        | 11.66    |
|                                    | Clevis mounting style   | 2.27       | 3.23     | 4.28       | 8.95        | 11.41    |
|                                    | Trunnion mounting style | 2.79       | 3.81     | 5.50       | 10.05       | 3.50     |
| Add'l weight per each 2" of stroke | For all mountings style | 0.38       | 0.48     | 0.51       | 0.97        | 1.06     |

### Cylinder Bore and Force: Push Stroke

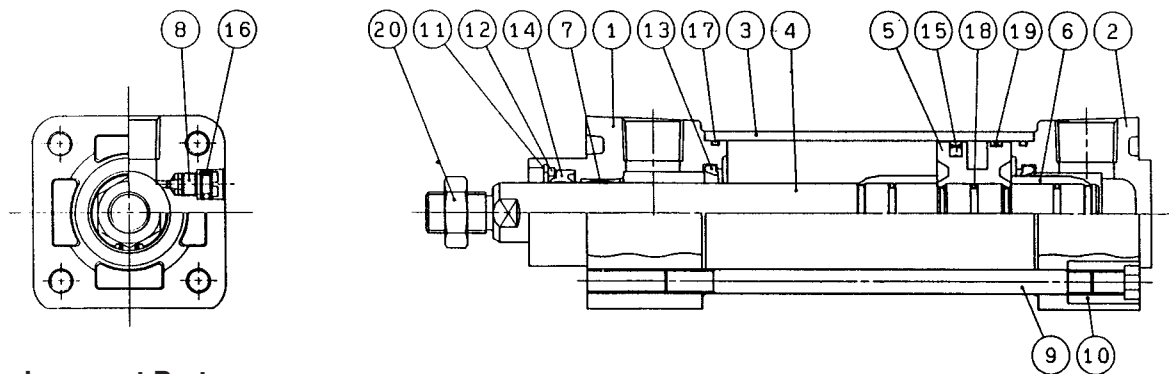
| Bore size (in) | Piston area (in) | Force (lbs); Push stroke<br>Operating medium pressure (PSI) |     |      |      |      |      |
|----------------|------------------|-------------------------------------------------------------|-----|------|------|------|------|
|                |                  | 50                                                          | 60  | 80   | 100  | 200  | 250  |
| 1.5            | 1.767            | 88                                                          | 106 | 141  | 177  | 353  | 442  |
| 2              | 3.142            | 157                                                         | 188 | 251  | 314  | 628  | 785  |
| 2.5            | 4.909            | 245                                                         | 295 | 393  | 491  | 982  | 1227 |
| 3.25           | 8.296            | 415                                                         | 498 | 664  | 830  | 1659 | 2074 |
| 4              | 12.566           | 628                                                         | 754 | 1005 | 1257 | 2513 | 3142 |

### Cylinder Bore and Force: Pull Stroke

| Piston rod diameter (in) | Piston rod area (in) | Force (lbs); Pull stroke (Deduct the listed thrusts corresponding to the rod size from push stroke pressure)<br>Operating medium pressure (psi) |    |     |     |     |     |
|--------------------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|-----|-----|-----|
|                          |                      | 50                                                                                                                                              | 60 | 80  | 100 | 200 | 250 |
| 0.625                    | 0.307                | 15                                                                                                                                              | 18 | 25  | 31  | 61  | 77  |
| 1                        | 0.785                | 39                                                                                                                                              | 47 | 63  | 79  | 157 | 196 |
| 1.375                    | 1.485                | 74                                                                                                                                              | 89 | 119 | 148 | 297 | 371 |

# Series NCA1

## Construction



### Replacement Parts

| No. | Description          | Material       |
|-----|----------------------|----------------|
| ①   | Rod cover            | Aluminum alloy |
| ②   | Head cover           | Aluminum alloy |
| ③   | Cylinder tube        | Aluminum alloy |
| ④   | Piston rod           | Carbon steel   |
| ⑤   | Piston               | Aluminum alloy |
| ⑥   | Cushion ring         | Brass          |
| ⑦   | Rod bushing          | Bronze casted  |
| ⑧   | Cushion valve        | Carbon steel   |
| ⑨   | Tie-rod              | Carbon steel   |
| ⑩   | Tie-rod nut          | Carbon steel   |
| ⑪   | Retaining ring       | Carbon steel   |
| ⑫   | Rod seal retainer    | Carbon steel   |
| ⑬*  | Cushion seal         | Urethan rubber |
| ⑭*  | Rod seal             | NBR            |
| ⑮*  | Piston seal          | NBR            |
| ⑯*  | Cushion valve seal   | NBR            |
| ⑰*  | Cylinder tube gasket | NBR            |
| ⑱   | Piston gasket        | NBR            |
| ⑲   | Wear ring            | Resin          |
| ⑳   | Rod jam nut          | Carbon steel   |

\* Components included in a seal kit.

### How to Order Seal Kit

|               |              |             |               |                             |
|---------------|--------------|-------------|---------------|-----------------------------|
| <b>NCA1</b>   |              | <b>W</b>    | <b>150</b>    | <b>PS</b>                   |
| <b>Option</b> |              | <b>Bore</b> | <b>Option</b> |                             |
| —             | Single rod   | 150         | -XB5***       | Oversized rod               |
| W             | Double rod   | 200         | -XB6***       | High temperature            |
| K*            | Non-rotating | 250         | -XB7***       | Low temperature             |
|               |              | 325         | -XC11         | Dual operation/Single rod** |
|               |              | 400         |               |                             |

\* Available for 150, 200 and 250 bores only.

\*\* Use single rod designation when ordering XC11 kit.

Note: XC10 seal kit order 2 single rod kits.

\*\*\* Not available with W and K option

# Series NCA1

# Auto Switch Specifications

**Applicable Auto Switch**/Refer to page 6-16-1 for further information on auto switches.

| Type               | Special function               | Electrical entry | Indicator light | Wiring (Output)     | Load voltage |              | Auto switch model | Lead wire length (m) <sup>Note</sup> |       |       | Connector | Applicable load |            |
|--------------------|--------------------------------|------------------|-----------------|---------------------|--------------|--------------|-------------------|--------------------------------------|-------|-------|-----------|-----------------|------------|
|                    |                                |                  |                 |                     | DC           | AC           |                   | 0.5 (Nil)                            | 3 (L) | 5 (Z) |           |                 |            |
| Reed switch        | —                              | Grommet          | Yes             | 2-wire              | 24 V         | 12 V         | A53               | ●                                    | ●     | ●     | —         | —               | PLC        |
|                    | —                              |                  |                 | 3-wire (Equiv. NPN) | —            | 5 V          | A54               | ●                                    | ●     | ●     | —         | —               | Relay, PLC |
|                    | Diagnosis indication (2-color) |                  |                 | 2-wire              | 24 V         | 12 V         | A59W              | ●                                    | ●     | —     | —         | —               | Relay, PLC |
|                    | —                              |                  |                 | 2-wire              | 24 V         | 5 V, 12 V    | A64               | ●                                    | ●     | —     | —         | —               | PLC        |
| Solid state switch | —                              | Grommet          | Yes             | 3-wire (NPN)        | —            | 5 V, 12 V    | A67               | ●                                    | ●     | —     | —         | —               | IC circuit |
|                    | —                              |                  |                 | 3-wire (PNP)        | —            | 5 V, 12 V    | F59               | ●                                    | ●     | ○     | ○         | —               | Relay, PLC |
|                    | —                              |                  |                 | 2-wire              | —            | 100 V, 200 V | F5P               | ●                                    | ●     | ○     | ○         | —               | Relay, PLC |
|                    | —                              |                  |                 | 2-wire              | 24 V         | 12 V         | J51               | ●                                    | ●     | ○     | ○         | —               | Relay, PLC |
|                    | —                              |                  |                 | 3-wire (NPN)        | 24 V         | 5 V, 12 V    | J59               | ●                                    | ●     | ○     | ○         | —               | Relay, PLC |
|                    | —                              |                  |                 | 3-wire (PNP)        | 24 V         | 5 V, 12 V    | F59W              | ●                                    | ●     | ○     | ○         | —               | Relay, PLC |
|                    | Diagnosis indication (2-color) |                  |                 | 2-wire              | 24 V         | 12 V         | F5PW              | ●                                    | ●     | ○     | ○         | —               | Relay, PLC |
|                    | Water resistant (2-color)      |                  |                 | 4-wire (NPN)        | 24 V         | 12 V         | J59W              | ●                                    | ●     | ○     | ○         | —               | Relay, PLC |
|                    | Diagnosis output (2-color)     |                  |                 | 3-wire (NPN)        | 24 V         | 5 V, 12 V    | F5BAL             | —                                    | ●     | ○     | ○         | —               | Relay, PLC |
|                    | With timer                     |                  |                 | 3-wire (NPN)        | 24 V         | 5 V, 12 V    | F59F              | ●                                    | ●     | ○     | ○         | —               | Relay, PLC |
|                    | —                              |                  |                 | 3-wire (NPN)        | 24 V         | 5 V, 12 V    | F5NTL             | —                                    | ●     | ○     | ○         | —               | Relay, PLC |

Note) Lead wire length symbols: 0.5 m ..... Nil (Example) A53  
 3 m ..... L (Example) A53L  
 5 m ..... Z (Example) A53Z

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

CJ1

CJP

CJ2

CM2

CG1

MB

MB1

CA2

CS1

C76

C85

C95

CP95

NCM

NCA

D-

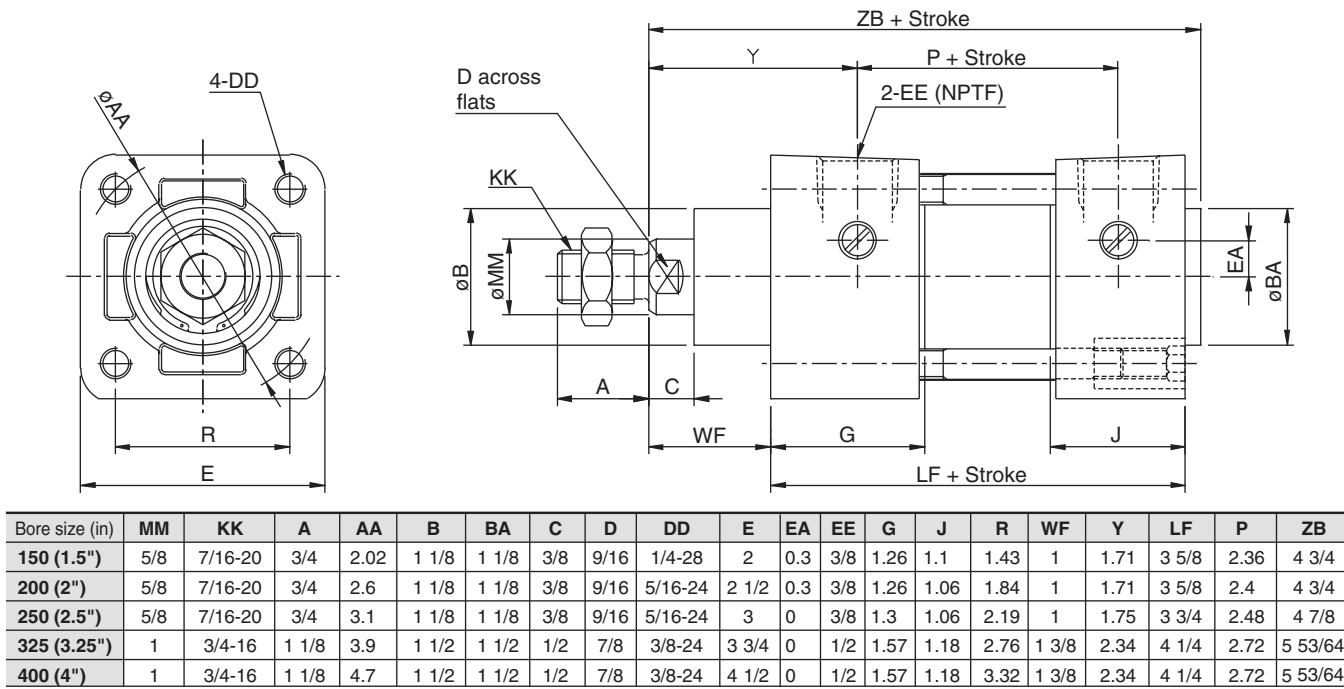
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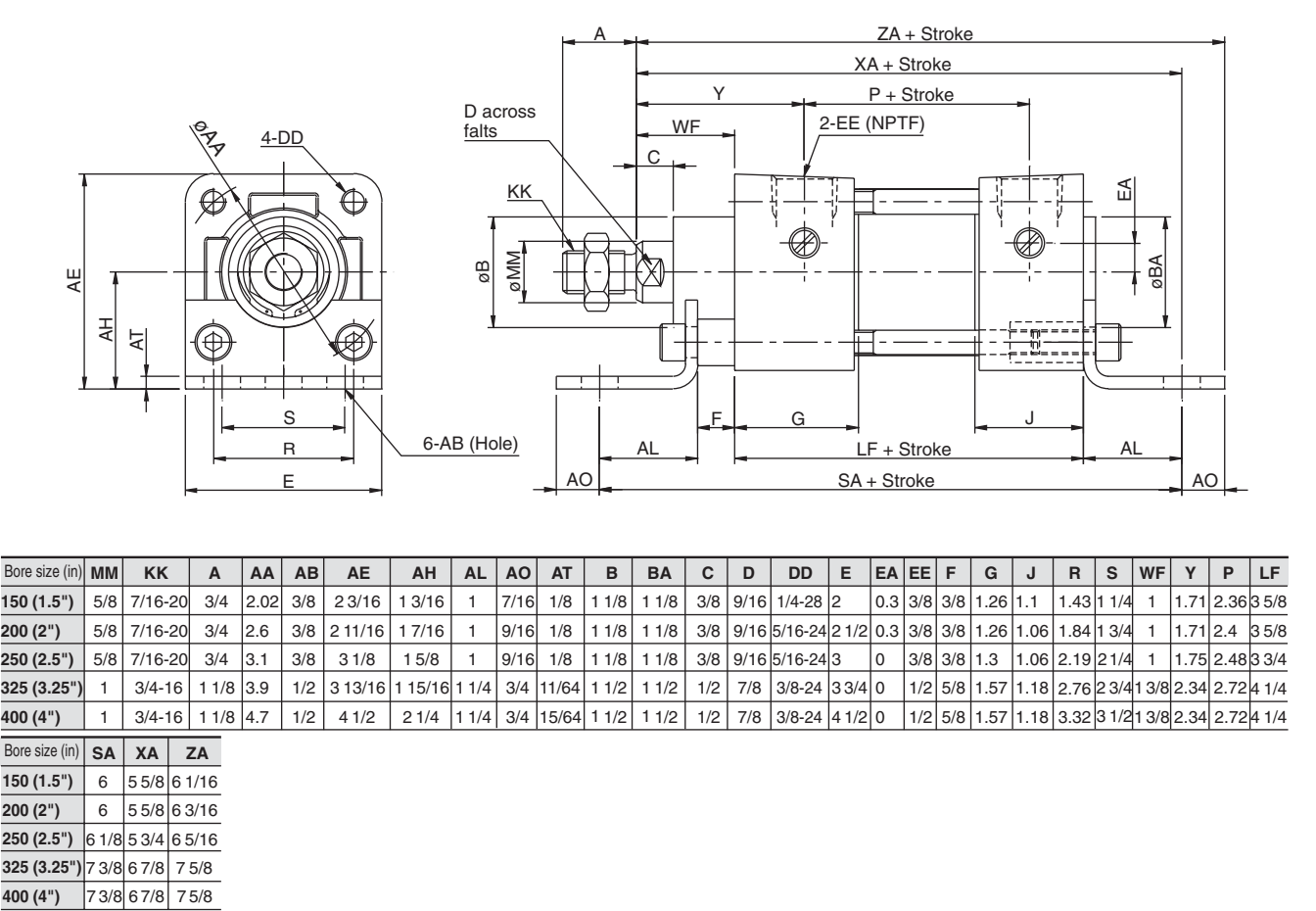
Data

# Series NCA1

## Basic Style: NC□A1B (MX0 mounting style)



## Foot Style: NC□A1L (MS1 mounting style)



## Oversized Rod

### Specifications

| Bore size (inch)            | 2                                                                               | 2.5 | 3.25 | 4 |
|-----------------------------|---------------------------------------------------------------------------------|-----|------|---|
| Fluid                       | Air                                                                             |     |      |   |
| Max. operating pressure     | 250 psi (1.75 MPa)                                                              |     |      |   |
| Min. operating pressure     | 8 psi (0.06 MPa)                                                                |     |      |   |
| Ambient & fluid temperature | 40 to 140°F (5 to 60°C)                                                         |     |      |   |
| Piston speed                | 2 to 20 inch/sec (50 to 500 mm/sec)                                             |     |      |   |
| Cushion                     | Air cushion standard                                                            |     |      |   |
| Mounting                    | Basic style, Foot style, Flange style, Center trunnion style, Side tapped style |     |      |   |

### Standard Stroke

| Bore size (in) | Standard stroke                                     |
|----------------|-----------------------------------------------------|
| 2, 2.50        | 1, 2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 24     |
| 3.25, 4        | 1, 2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 24, 28 |

### How to Order Oversized Rod/Standard

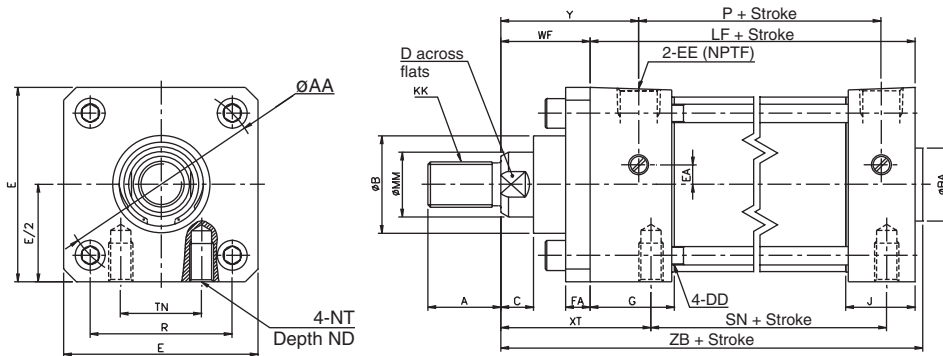
NC **D** A1 **Mounting** **Bore** **Stroke** **Suffix** - XB5

Ex: NCDA1B 250-0200-XB5

Auto switch capable

Oversized/rod

### Oversized Rod-Basic Style: NC□A1B (XB5)



| Bore size (in) | MM    | KK     | A     | AA  | B     | BA    | C   | D     | DD      | E     | EA  | EE  | FA  | G    | J    | R    | ND    | NT      | TN     | WF    | XT      | Y    | LF    | P    | SN    | ZB     |
|----------------|-------|--------|-------|-----|-------|-------|-----|-------|---------|-------|-----|-----|-----|------|------|------|-------|---------|--------|-------|---------|------|-------|------|-------|--------|
| 200 (2")       | 1     | 3/4-16 | 1 1/8 | 2.6 | 1 1/2 | 1 1/8 | 1/2 | 7/8   | 5/16-24 | 2 1/2 | 0.3 | 3/8 | 3/8 | 1.26 | 1.06 | 1.84 | 7/16  | 5/16-18 | 7/8    | 1 3/8 | 2 5/16  | 2.09 | 3 5/8 | 2.40 | 2 1/4 | 5 1/8  |
| 250 (2.5")     | 1     | 3/4-16 | 1 1/8 | 3.1 | 1 1/2 | 1 1/8 | 1/2 | 7/8   | 5/16-24 | 3     | 0   | 3/8 | 3/8 | 1.30 | 1.06 | 2.19 | 19/32 | 3/8-18  | 1 1/4  | 1 3/8 | 2 5/16  | 2.13 | 3 3/4 | 2.48 | 2 3/8 | 5 1/4  |
| 325 (3.25")    | 1 3/8 | 1-14   | 1 5/8 | 3.9 | 2     | 1 1/2 | 5/8 | 1 1/4 | 3/8-24  | 3 3/4 | 0   | 1/2 | 5/8 | 1.57 | 1.18 | 2.76 | 5/8   | 1/2-13  | 1 1/2  | 1 5/8 | 2 11/16 | 2.59 | 4 1/4 | 2.72 | 2 5/8 | 6 5/64 |
| 400 (4")       | 1 3/8 | 1-14   | 1 5/8 | 4.7 | 2     | 1 1/2 | 5/8 | 1 1/4 | 3/8-24  | 3 3/4 | 0   | 1/2 | 5/8 | 1.57 | 1.18 | 3.32 | 5/8   | 1/2-13  | 2 1/16 | 1 5/8 | 2 11/16 | 2.59 | 4 1/4 | 2.72 | 2 5/8 | 6 5/64 |



N304-EX

Air Cylinder

# *NCA1 Series*



NFPA Industrial Interchangeable Pneumatic Cylinders  
Medium Duty 5" to 8"  
Heavy Duty 1.5" to 14"

Air Cylinder Series NCA1-EX

MATERIAL SPECIFICATIONS

| MEDIUM DUTY XTAT                                                                                     |                 |     |     |
|------------------------------------------------------------------------------------------------------|-----------------|-----|-----|
| Bore Size                                                                                            | 5               | 6   | 8   |
| Barrel -                                                                                             |                 |     |     |
| Aluminum                                                                                             | Std             | Std | Std |
| Composite Fiber                                                                                      | Opt             | Opt | Opt |
| Head/Cap - Aluminum                                                                                  | Std             | Std | N/A |
| Head/Cap - Steel                                                                                     | N/A             | N/A | Std |
| Piston - Aluminum                                                                                    | Std             | Std | Std |
| Gland Bushing                                                                                        | Bronze Material |     |     |
| Note Material Specifications for above: Aluminum;<br>6061-T6, Steel; ASTM A36, Stainless Steel; 316. |                 |     |     |

TECHNICAL SPECIFICATIONS

|                                                                                                                   |                                     |
|-------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Fluid                                                                                                             | Air / Hydraulic* (250psi non-shock) |
| Lubrication                                                                                                       | Non Lube                            |
| Max operating Pressure                                                                                            | 250 PSI                             |
| Min Operating Pressure                                                                                            | 5 PSI                               |
| Ambient & Fluid Temp                                                                                              | 40-140°F / 5-60°C                   |
| Please note for Hydraulic Service please order the H option as denoted in the How to Order breakdown on pgs 2 & 3 |                                     |

HEAVY DUTY XTST

| Bore Size         | 1.5-4           | 5   | 6   | 8   | 10  | 12  | 14  |
|-------------------|-----------------|-----|-----|-----|-----|-----|-----|
| Barrel -          |                 |     |     |     |     |     |     |
| Steel             | Std             | Std | Std | Std | Std | Std | Std |
| Composite Fiber   | Opt             | Opt | Opt | Opt | Opt | Opt | Opt |
| Head/Cap - Steel  | Std             | Std | Std | Std | Std | Std | Std |
| Piston - Aluminum | Std             | Std | Std | Std | N/A | N/A | N/A |
| Piston - Steel    | N/A             | N/A | N/A | N/A | Std | Std | Std |
| Gland Bushing     | Bronze Material |     |     |     |     |     |     |

Note Material Specifications for above: Aluminum; 6061-T6, Steel; ASTM A36, Stainless Steel; 316,

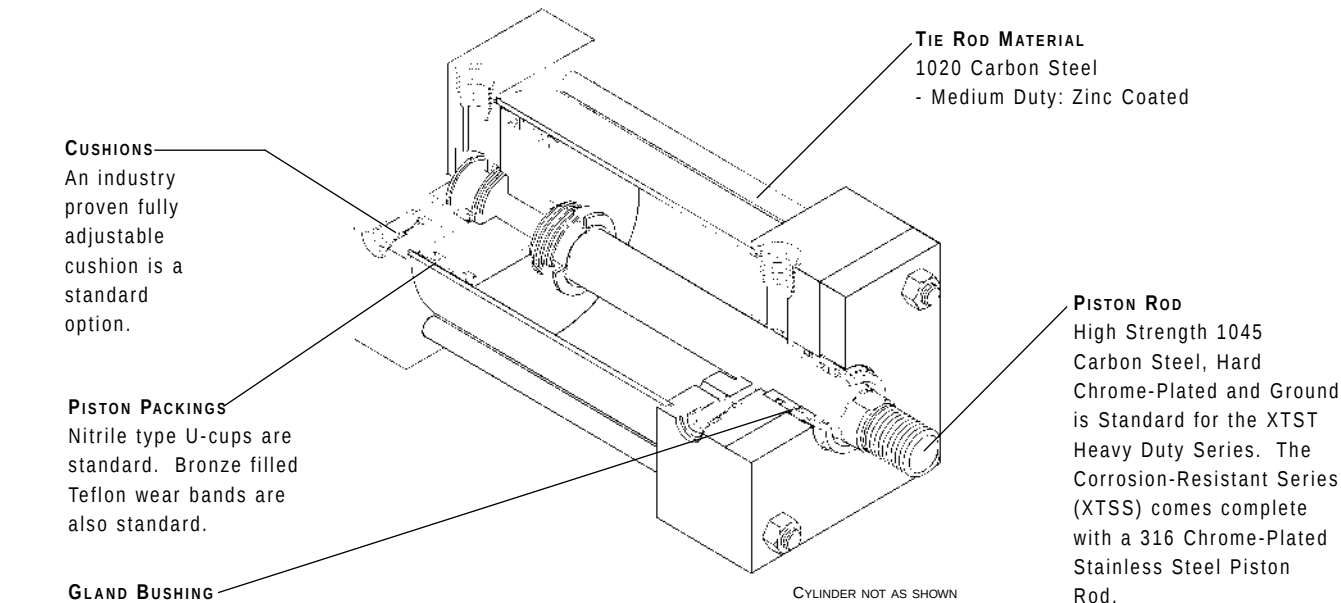
N/A - Not Available; please contact SMC Customer Service

OPT - Optional; see How to Order

CORROSION RESISTANT XTSS

|               |                         |
|---------------|-------------------------|
| Barrel        | Stainless Steel         |
|               | Composite Tube Optional |
| Head/Cap      | Stainless Steel         |
| Piston        | Aluminum                |
| Tie Rods      | Stainless Steel         |
| Gland Bushing | Delrin                  |

Note Material Specifications for above: Aluminum; 6061-T6, Stainless Steel; 316,



- **Steel and Stainless Steel Construction**
- **Replaceable Rod Gland Design**
- **Auto Switch Sensing Option (Stainless and Composite Tube Only)**
- **Hydraulic Service / 250PSI Non Shock (H Option)**
- **Non Rotating Piston Rod & Through Hole Rod Types Available**
- **Full Range of NFPA Interchangeable Mounting Configurations**
  - **Mounting Dimensions are in accordance with ANSI/NFPA T3.6.7 R2-1996, Fluid Power Systems and products - Square Head Industrial Cylinders - Mounting Dimensions.**

## 2

- **Aluminum Construction**
- **Replaceable Rod Gland Design**
- **Auto Switch Capable**
- **Hydraulic Service / 250PSI Non-Shock (H Option)**
- **Full Range of NFPA Interchangeable Mounting Configurations**
  - Mounting Dimensions are in accordance with ANSI/NFPA T3.6.7 R2-1996, Fluid Power Systems and products - Square Head Industrial Cylinders - Mounting Dimension

## How To ORDER

