

Series UAQ

Compact Cylinder/Double Acting, Single Acting Type

Bore Size mm(inch) : $\phi 12(1/2\text{Nom.})$, $\phi 16(5/8\text{Nom.})$, $\phi 20(3/4\text{Nom.})$, $\phi 25(1\text{Nom.})$, $\phi 32(1 1/4\text{Nom.})$,
 $\phi 40(1 1/2\text{Nom.})$, $\phi 50(2\text{Nom.})$, $\phi 63(2 1/2\text{Nom.})$, $\phi 80(3 1/4\text{Nom.})$, $\phi 100(4\text{Nom.})$

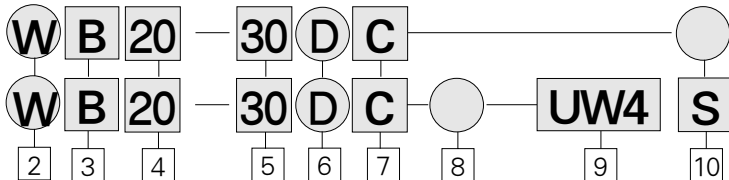


- SPACE SAVING DESIGN
- LIGHT WEIGHT
- 10 BORE SIZES
- AUTO SWITCH CAPABLE
- CYLINDERS FOR SPECIAL APPLICATIONS
- MANUFACTURING CERTIFIED TO ISO 9001&9002 STANDARDS

How to Order

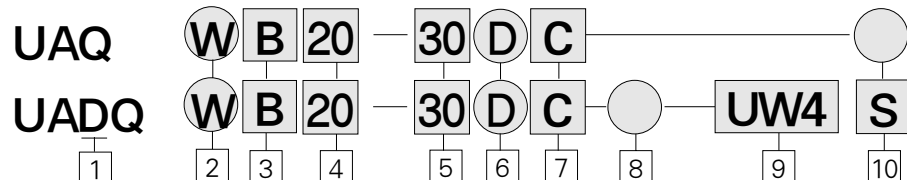
Standard Type

UAQ



With Auto Switch

UADQ



1 Built-in Magnet

※For details, please refer to page A-188.

2 Model

Blank : Single Rod
 W : Double Rod
 K : Non-Rotating

3 Type

B : Through Hole (Standard Type)
 A : Both Ends Tapped

※For the Dimensions of "A" type please refer to page A-205.

4 Bore Size mm(inch)

12 : 12 (1/2Nom.)
 16 : 16 (5/8Nom.)
 20 : 20 (3/4Nom.)

25 : 25 (1Nom.)

32 : 32 (1 1/4Nom.)

40 : 40 (1 1/2Nom.)

50 : 50 (2Nom.)

63 : 63 (2 1/2Nom.)

80 : 80 (3 1/4Nom.)

100 : 100 (4Nom.)

5 Cylinder Stroke(mm)

※ For stroke refer to page 2

6 Action

D : Double Acting
 S : Single Acting/Spring Return
 T : Single Acting/Spring Extended

7 Body Option(See list below)

Blank : Standard
 C : Rubber cushion
 M : Rod end male thread
 F : Rear boss mount

8 Applicable Auto Switch

Blank : Without Auto Switch

UW4 : UW4(Reed Switch)

※ Suffix L for lead wire exceeding 3m length.
 Example) UW4L

9 Number of Auto Switch

Blank : 2 pcs.

S : 1 pc.

10 Special Option

Blank : Standard type

XC16 : Copper-free

Standard/Specifications

| | |
|-------------------------------|-----------------------------------|
| Fluid | Air |
| Max. Operating Pressure | 140 PSI (9.9kgf/cm ²) |
| Ambient and Fluid Temperature | 15~160 ° F (-10~70℃) |
| Lubrication | Not Required |
| Cushion | None |
| Rod End Thread | Female (Standard Type) |
| Stroke Tolerance | +1.0 ₀ mm (0.039 inch) |
| Mounting | Through Hole (Standard) |
| Piston Speed | 50~500 mm/sec (2~20 inch/sec) |

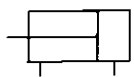
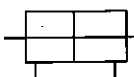
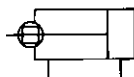

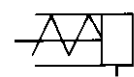
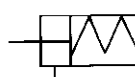
Body Option/Available

● - Standard ○ - Optional

| Type | Action | Code | Single Rod | | | | Double Rod | | | | | | | |
|------------------|---------------|-------------------|------------|---|---|----|------------|----|----|-----|-------|---|---|----|
| | | | Blank | M | C | CM | F | FM | FC | FCM | Blank | M | C | CM |
| Standard Type | Double Acting | (1/2Nom.~3/4Nom.) | ● | ● | ● | ○ | ● | ● | ● | ○ | ● | ● | ● | ● |
| | | (1 1/4Nom.~4Nom.) | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | Single Acting | Spring return | ● | ● | - | - | ● | ● | - | - | - | - | - | - |
| | | Spring extended | ● | ● | - | - | ● | ● | - | - | - | - | - | - |
| With Auto Switch | Double Acting | (1/2Nom.) | - | ● | - | - | ● | ● | - | - | - | - | - | - |
| | | (5/8Nom.~1Nom.) | ● | ● | ● | ○ | ● | ● | ● | ○ | ● | ○ | ○ | ○ |
| | | (1 1/4Nom.~4Nom.) | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

Note) Single Acting(Spring return / Spring extended) is optional.

Model/Standard Stroke

| Bore Size mm(inch) | Double Acting | | | | Single Acting | |
|-----------------------|---|---|---|---|---|---|
| | Single Rod Type | Double Rod Type | Non-Rotating Rod Type | Rear Boss Mount Type | Spring Return Type | Spring Extended Type |
| |  |  |  |  |  |  |
| Standard Stroke (mm) | | | | Standard Stroke (mm) | | |
| φ 12(1/2Nom.) | 5, 10, 15 | - | - | 5, 10, 15 | - | - |
| φ 16(5/8Nom.) | 20, 25, 30 | - | - | 20, 25, 30 | - | - |
| φ 20(3/4Nom.) | 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75 | 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, | 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, | 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75 | 5, 10, | 5, 10, |
| φ 25(1Nom.) | | | | | - | - |
| φ 32(1 1/4Nom.) | 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100, 125, 150 | 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100 | 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75 | 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100, 125, 150 | 5, 10, | 5, 10, |
| φ 40(1 1/2Nom.) | | | | | | |
| φ 50(2Nom.) | | | | | 10, | 10, |
| φ 63(2 1/2Nom.) | 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100, 125, 150 | 10, 15, 20, 25, 25, 30, 35, 40, 45, 50, 75, 100 | 10, 15, 20, 25, 25, 30, 35, 40, 45, 50, 75, 100 | 10, 15, 20, 25, 25, 30, 35, 40, 45, 50, 75, 100, 125, 150 | | |
| φ 80(3 1/4Nom.) | | | | | - | - |
| φ 100(4Nom.) | | | | | | |

• Intermediate Stroke

A spacer of 5, 10, 15 and 20mm is used for intermediate strokes between 55 and 100mm stroke(55, 60, 65...).
(Example) UAQB50-55D is produced by installing 20mm spacer in UAQB50-75.

Series UAQ

Options

| Name | Applicable Type |
|------------------------------|------------------------------------|
| Cushion | Rubber Cushion/Double Acting Only |
| Rod End Male Thread | Optional |
| Boss Mount | Optional |
| Non-Rotating Piston Rod Type | Double Acting/Single Rod Type Only |

Minimum Operating Pressure

(PSI)

| Type \ Bore Size mm (inch) | 12 (1/2Nom.) | 16 (5/8Nom.) | 20 (3/4Nom.) | 25 (1Nom.) | 32 (1 1/4Nom.) | 40 (1 1/2Nom.) | 50 (2Nom.) | 63 (2 1/2Nom.) | 80 (3 1/4Nom.) | 100 (4Nom.) |
|---|-----------------|-----------------|-----------------|---------------|-------------------|-------------------|---------------|-------------------|-------------------|----------------|
| Double Acting (Single Rod) | 10.0 | 10.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Single Acting (Spring Return, Spring Extended) | — | — | 25.5 | — | 24.0 | 21.5 | 18.5 | — | — | — |

Non-Rotating Rod Accuracy

| Bore Size mm (inch) | 20 • 25 (3/4Nom.) (1Nom.) | 32 (1 1/4Nom.) | 40 (1 1/2Nom.) | 50 (2Nom.) | 63 (2 1/2Nom.) |
|---------------------------|------------------------------|-------------------|-------------------|---------------|-------------------|
| Non-Rotating Rod Accuracy | ±1 ° | ±0.8 ° | | | |

Theoretical Force

Single Acting

(lbs)

| Action | Bore Size mm (inch) | Operating pressure (PSI) | | | Spring Force | | |
|--------------------|------------------------|--------------------------|-------|--------|-----------------------------|---------------------------|----------------------------|
| | | 50 | 75 | 100 | Spring Extended Position | Spring Return Position | Rod and Max. Axial Load |
| Spring Return | 20 (3/4Nom.) | 20.8 | 33.0 | 45.10 | 3.5 | 1.3 | 1.48 |
| | 32 (1 1/4Nom.) | 57.0 | 88.2 | 1.20 | 5.3 | 3.3 | 3.90 |
| | 40 (1 1/2Nom.) | 90.6 | 139.0 | 188.00 | 6.8 | 2.9 | 3.90 |
| | 50 (2Nom.) | 140.0 | 216.0 | 292.0 | 12.1 | 5.5 | 6.83 |
| Spring Extended | 20 (3/4Nom.) | 12.0 | 21.1 | 30.30 | 6.2 | 1.1 | 1.48 |
| | 32 (1 1/4Nom.) | 40.2 | 63.5 | 86.90 | 6.6 | 4.4 | 3.90 |
| | 40 (1 1/2Nom.) | 75.2 | 116.0 | 157.0 | 6.6 | 4.4 | 3.90 |
| | 50 (2Nom.) | 109.0 | 173.0 | 237.0 | 18.7 | 5.5 | 6.83 |

Auto Switch Mounting Bracket/PART No.

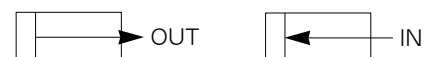
| Bore Size mm (inch) | Mounting Band | Note | Applicable Auto Switch |
|---|---------------|--|------------------------|
| 12 • 16 • 20 • 25 (1/2Nom., 5/8Nom., 3/4Nom., 1Nom.) | BQ-1 | • Auto Switch Mounting Screw (M3×0.5×8 l) • Square Nut | UW4 |
| 32 • 40 • 50 • 63 • 80 • 100 (3/4Nom., 1 1/4Nom., 1 1/2Nom., 2Nom.) | BQ-2 | • Auto Switch Mounting Screw (M3×0.5×10 l) • Auto Switch Spacer • Auto Switch Mounting Nut | |

Cautions

- When mounting, completely flush piping, be careful that dust and chips do not enter the cylinder.
- The piston rod load should always be aligned with the cylinder axis.
 - Cylinder installation requires accurate alignment.
 - When used as a stopper, avoid side loading of the piston rod.
- Prevent damage to the piston rod. A damaged piston rod can lead to failure of the rod packing and result in cylinder failure.
- When disassembling, remove the retaining ring (C-type) with special tool. (Assembling tool for C-type retaining ring)

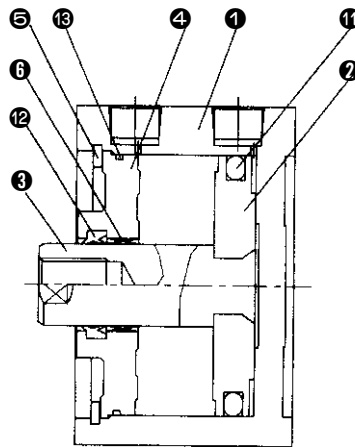
Double Acting Single Rod (lbs)

| Bore size | Rod direction | Operating pressure PSI | | |
|------------------|---------------|------------------------|------|------|
| | | 50 | 75 | 100 |
| φ 12 (1/2Nom.) | OUT | 8.7 | 13.1 | 17.5 |
| | IN | 6.6 | 9.8 | 13.1 |
| φ 16 (5/8Nom.) | OUT | 15.6 | 23.4 | 31.2 |
| | IN | 11.7 | 17.5 | 23.4 |
| φ 20 (3/4Nom.) | OUT | 24.3 | 36.5 | 48.6 |
| | IN | 18.2 | 27.3 | 36.5 |
| φ 25 (1Nom.) | OUT | 38.0 | 57.0 | 76.0 |
| | IN | 29.3 | 43.9 | 58.5 |
| φ 32 (1 1/4Nom.) | OUT | 62.3 | 93.5 | 12.5 |
| | IN | 46.8 | 70.1 | 93.5 |
| φ 40 (1 1/2Nom.) | OUT | 97.4 | 146 | 195 |
| | IN | 81.8 | 123 | 164 |
| φ 50 (2Nom.) | OUT | 152 | 228 | 304 |
| | IN | 128 | 192 | 256 |
| φ 63 (2 1/2Nom.) | OUT | 242 | 362 | 483 |
| | IN | 217 | 326 | 434 |
| φ 80 (3 1/4Nom.) | OUT | 390 | 584 | 779 |
| | IN | 352 | 527 | 703 |
| φ 100 (4Nom.) | OUT | 609 | 913 | 1217 |
| | IN | 554 | 831 | 1108 |

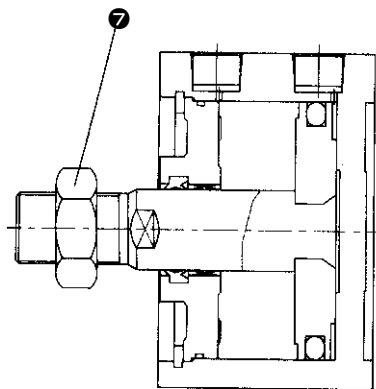


Construction/Parts List

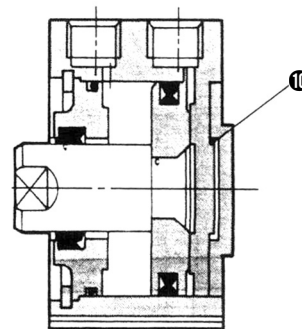
Double Acting/Single Rod Type



Standard Type



Rod End Male Thread Type



Rear boss mount type

Parts List

| No. | Description | Material | Note |
|-----|----------------|------------------------|-----------------------------------|
| ① | Cylinder Tube | Aluminum Alloy | |
| ② | ※ Piston | Aluminum Alloy | Chromate |
| ③ | ※ Piston Rod | Carbon Steel | 32(1½Nom.)~100(4Nom), Hard chrome |
| ④ | Collar | Aluminum Bearing Alloy | 12(1½Nom.)~40(1½Nom) |
| | | Aluminum Alloy Casting | 50(2Nom)~100(4Nom) |
| ⑤ | Retaining Ring | Carbon Tool Steel | Phosphate Casting |

※ 12(1½Nom.)~25(1Nom.)Piston rod...One piece construction(Stainless steel)

| No | Description | Material | Note |
|----|--------------------|---------------------|-----------------------|
| ⑥ | Bushing | Lead Bronze Casting | Only above φ50(2Nom.) |
| ⑦ | Rod end nut | Carbon steel | Nickel Plated |
| ⑧ | A Bumper | Polyurethane rubber | |
| ⑨ | B Bumper | Polyurethane rubber | |
| ⑩ | Boss mount adapter | Aluminum alloy | 20(¾Nom)~100(4Nom) |

Seals List

| No | Description | Material | Parts No. | | | | | | | | | |
|----|----------------|----------|------------|-----------|-----------|-----------|------------|------------|-----------|------------|------------|------------|
| | | | 12(1½Nom.) | 16(⅝Nom.) | 20(¾Nom.) | 25(1Nom.) | 32(1¼Nom.) | 40(1½Nom.) | 50(2Nom.) | 63(2½Nom.) | 80(3¼Nom.) | 100(4Nom.) |
| ⑪ | Piston packing | NBR | NLP-12 | NLP-16A | NLP-20A | NLP-25A | NLP-32A | NLP-40A | NLP-50A | NLP-63A | NLP-80A | NLP-100A |
| ⑫ | Rod packing | NBR | DYR-6K | DYR-8K | DYR-10SK | DYR-12 | DYR-16 | PDU-16Z | PDU-20Z | PDU-20Z | PDU-25Z | PDU-30Z |
| ⑬ | Gasket | NBR | SO-013-6 | C14 | C18 | C22 | C29 | C36 | C46 | C60 | C75 | C95 |

ACP

UACP

AX

AS

AM

AL
ALX

UARD

UAQ

AJ

AG

UAG

ADM

ADR

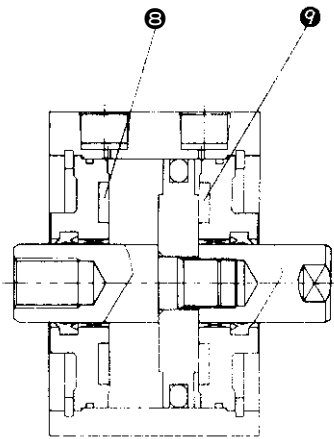
AMR

UAMR

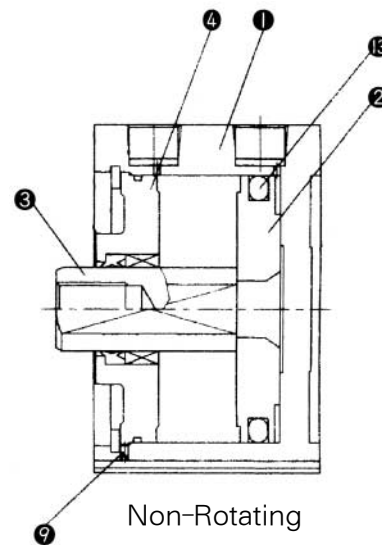
AST

W~

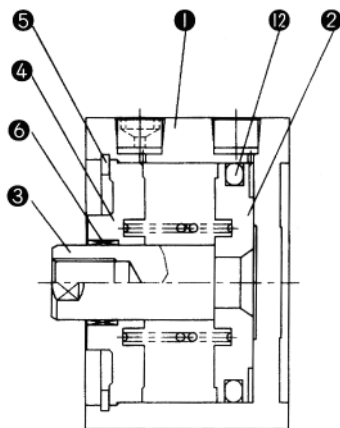
Construction/Parts List



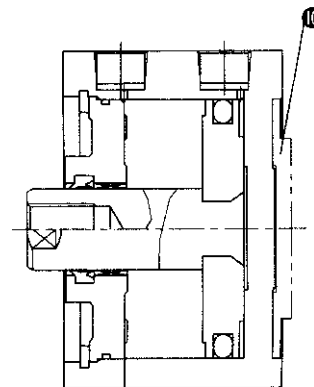
Double Rod Type



Non-Rotating



Spring Return Type



Spring Extended Type

Parts List

| No. | Description | Material | Note |
|-----|----------------|--|-------------------|
| 1 | Cylinder Tube | Aluminum Alloy | |
| 2 | ※ Piston | Aluminum Alloy | Chromate |
| 3 | ※ Piston Rod | Carbon Steel | |
| 4 | Collar | Aluminum Bearing Alloy Aluminum Alloy Casting | |
| 5 | Retaining Ring | Carbon Tool Steel | Phosphate Coating |

※ 12(1/2Nom.)~25(1Nom.)Piston rod...One piece construction(Stainless steel)

| No | Description | Material | Note |
|----|--------------------|---------------------|-----------------------------|
| 6 | Bushing | Lead Bronze Casting | Only above $\phi 50$ (2Nom) |
| 7 | Rod End Nut | Carbon Steel | Nickel Plating |
| 8 | A Bumper | Polyurethane Rubber | |
| 9 | B Bumper | Polyurethane Rubber | |
| 10 | Boss Mount Adapter | Aluminum Alloy | |

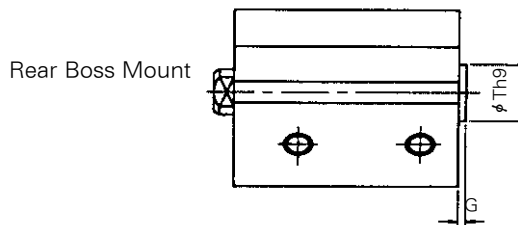
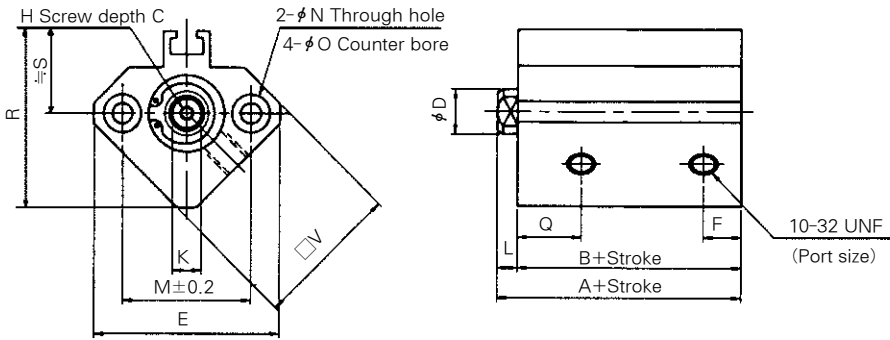
Seals List

| No | Description | Material | Parts No. | | | | | | | | | |
|----|----------------|----------|-------------|-------------|-------------|-----------|---------------|---------------|-----------|---------------|---------------|------------|
| | | | 12(1/2Nom.) | 16(5/8Nom.) | 20(3/4Nom.) | 25(1Nom.) | 32(1 1/4Nom.) | 40(1 1/2Nom.) | 50(2Nom.) | 63(2 1/2Nom.) | 80(3 1/4Nom.) | 100(4Nom.) |
| 11 | Piston Packing | NBR | NLP-12 | NLP-16A | NLP-20A | NLP-25A | NLP-32A | NLP-40A | NLP-50A | NLP-63A | NLP-80A | NLP-100A |
| 12 | Rod Packing | NBR | DYR-6K | DYR-8K | DYR-10SK | DYR-12 | DYR-16 | PDU-16Z | PDU-20Z | PDU-20Z | PDU-25Z | PDU-30Z |
| 13 | Gasket | NBR | SO-013-6 | C14 | C18 | C22 | C29 | C36 | C46 | C60 | C75 | C95 |

Double Acting/Single Rod Type : Dimensions

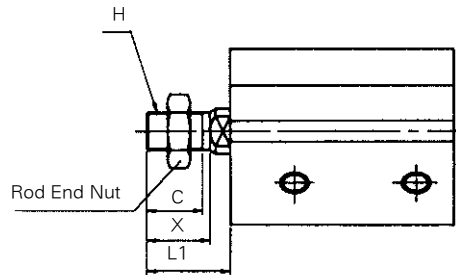
Bore Size : $\phi 12 \sim \phi 25$ (1/2 Nom. ~ 1 Nom.)

For the dimension of "A" type (Both Ends Tapped) Please refer to Page A-205.



| Rear Boss Mount (mm) | | |
|----------------------|-----|-----------------------------------|
| Bore size mm (inch) | G | Th9 |
| $\phi 12$ (1/2 Nom.) | 1.5 | 15 ⁰ _{-0.043} |
| $\phi 16$ (5/8 Nom.) | 1.5 | 20 ⁰ _{-0.052} |
| $\phi 20$ (3/4 Nom.) | 2 | 13 ⁰ _{-0.043} |
| $\phi 25$ (1 Nom.) | 2 | 15 ⁰ _{-0.043} |

Rod End Male Thread



| Rod End Male Thread (mm) | | | | |
|--------------------------|----|------|------------|------|
| Bore size mm (inch) | C | X | H | L1 |
| $\phi 12$ (1/2 Nom.) | 9 | 10.5 | #8-32 UNC | 14.0 |
| $\phi 16$ (5/8 Nom.) | 10 | 12 | #8-32 UNC | 15.5 |
| $\phi 20$ (3/4 Nom.) | 12 | 14 | #10-32 UNF | 18.5 |
| $\phi 25$ (1 Nom.) | 15 | 17.5 | 1/4-28 UNF | 22.5 |

Standard Type (Unit : mm)

| Bore size mm (inch) | Stroke Range (mm) | A | B | C | D | E | F | H | K | L | M | N | ϕO | Q | R | S | $\square V$ |
|----------------------|-------------------|------|------|----|----|----|-----|------------|----|-----|----|-----|---------------|------|------|------|-------------|
| $\phi 12$ (1/2 Nom.) | 5~30 | 20.5 | 17 | 6 | 6 | 32 | 5 | #8-32 UNC | 5 | 3.5 | 22 | 3.5 | 6.5 Depth 3.5 | 11 | 35.5 | 19.5 | 25 |
| $\phi 16$ (5/8 Nom.) | 5~30 | 22 | 18.5 | 8 | 8 | 38 | 5.5 | #8-32 UNC | 6 | 3.5 | 28 | 3.5 | 6.5 Depth 3.5 | 10 | 41.5 | 22.5 | 29 |
| $\phi 20$ (3/4 Nom.) | 5~50 | 24 | 19.5 | 7 | 10 | 47 | 5.5 | #10-32 UNF | 8 | 4.5 | 36 | 5.5 | 9 Depth 7 | 10.5 | 48 | 24.5 | 36 |
| $\phi 25$ (1 Nom.) | 5~50 | 27.5 | 22.5 | 12 | 12 | 52 | 5.5 | 1/4-28 UNF | 10 | 5 | 40 | 5.5 | 9 Depth 7 | 11 | 53.5 | 27.5 | 40 |

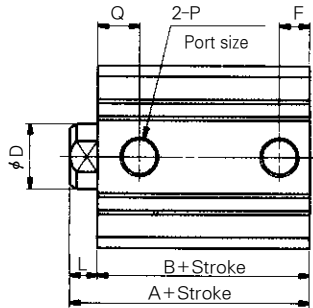
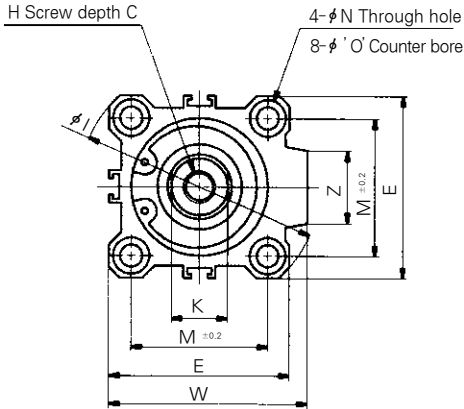
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- UACP
- AX
- AS
- AM
- AL ALX
- UARD
- UAQ
- AJ
- AG
- UAG
- ADM
- ADR
- AMR
- UAMR
- AST
- W~

Series UAQ

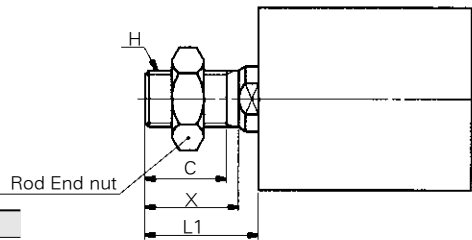
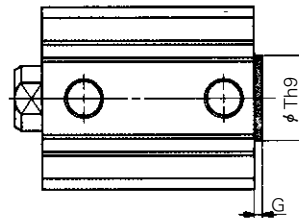
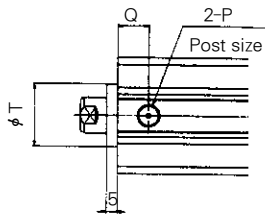
Double Acting/Single Rod Type : Dimensions

Bore Size : $\phi 32 \sim \phi 100$ (1 1/4 Nom. ~ 4 Nom.)

For the dimension of "A" type (Both Ends Tapped) Please refer to Page A-205.



Long Stroke (125st or more)



| Bore size (inch) | T |
|--|-------------------------------------|
| $\phi 32$ (1 1/4 Nom.) | 22 ⁰ / _{-0.052} |
| $\phi 40$ (1 1/2 Nom.) | 28 ⁰ / _{-0.052} |
| $\phi 50$ (2 Nom.), $\phi 63$ (2 1/2 Nom.) | 35 ⁰ / _{-0.062} |
| $\phi 80$ (3 1/4 Nom.) | 43 ⁰ / _{-0.062} |
| $\phi 100$ (4 Nom.) | 59 ⁰ / _{-0.074} |

Rear Boss Mount (mm)

| Bore size (inch) | G | Th9 |
|------------------------|---|-------------------------------------|
| $\phi 32$ (1 1/4 Nom.) | 2 | 21 ⁰ / _{-0.052} |
| $\phi 40$ (1 1/2 Nom.) | 2 | 28 ⁰ / _{-0.052} |
| $\phi 50$ (2 Nom.) | 2 | 35 ⁰ / _{-0.062} |
| $\phi 63$ (2 1/2 Nom.) | 2 | 35 ⁰ / _{-0.062} |
| $\phi 80$ (3 1/4 Nom.) | 2 | 43 ⁰ / _{-0.062} |
| $\phi 100$ (4 Nom.) | 2 | 59 ⁰ / _{-0.074} |

Rod End Male Thread (mm)

| Bore size (inch) | C | X | H | L1 ※ |
|------------------------|------|------|-------------|-------------|
| $\phi 32$ (1 1/4 Nom.) | 20.5 | 23.5 | 5/16-24 UNF | 28.5 (38.5) |
| $\phi 40$ (1 1/2 Nom.) | 20.5 | 23.5 | 3/8-24 UNF | 28.5 (38.5) |
| $\phi 50$ (2 Nom.) | 26 | 28.5 | 1/2-20 UNF | 33.5 (43.5) |
| $\phi 63$ (2 1/2 Nom.) | 26 | 28.5 | 1/2-20 UNF | 33.5 (43.5) |
| $\phi 80$ (3 1/4 Nom.) | 32.5 | 35.5 | 5/8-18 UNF | 43.5 (53.5) |
| $\phi 100$ (4 Nom.) | 32.5 | 35.5 | 3/4-16 UNF | 43.5 (53.5) |

※ () : 125st or more

Standard Type

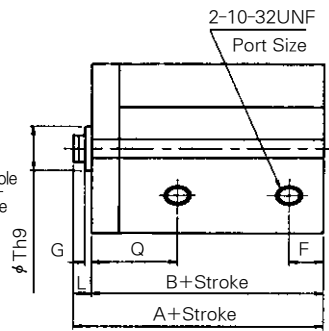
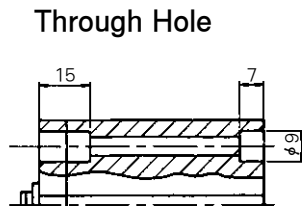
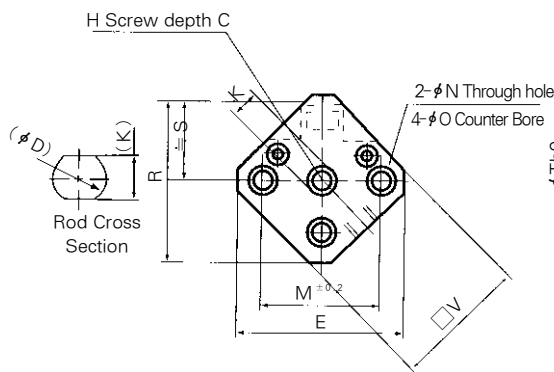
(Unit : mm)

| Bore size mm (inch) | Stroke range mm | A | B | C | D | E | F | H | I | J | K | L | M | N | φ O | P | Q | W | Z |
|------------------------|-----------------|------|------|----|----|-----|------|-------------|-----|-----|----|------|----|-----|---------------|-----------|------|-------|----|
| $\phi 32$ (1 1/4 Nom.) | 5 | 30 | 23 | 13 | 16 | 45 | 5.5 | 5/16-24 UNF | 60 | 4.5 | 14 | 7 | 34 | 5.5 | 9Depth7 | 10-32 UNF | 11.5 | 49.5 | 18 |
| | 10~50 | 40 | 33 | | | | 7.5 | | | | | 17 | | | | 10.5 | | | |
| | 75, 100 | 62.5 | 45.5 | | | | 12.5 | | | | | 12.5 | | | | | | | |
| $\phi 40$ (1 1/2 Nom.) | 5~50 | 36.5 | 29.5 | 13 | 16 | 52 | 8 | 3/8-24 UNF | 69 | 5 | 14 | 7 | 40 | 5.5 | 9Depth7 | NPT1/8" | 11 | 57 | 18 |
| | 75, 100 | 46.5 | 39.5 | | | | 14 | | | | | 14 | | | | | | | |
| | 125, 150 | 72 | 55 | | | | 17 | | | | | | | | | | | | |
| $\phi 50$ (2 Nom.) | 10~50 | 38.5 | 30.5 | 15 | 20 | 64 | 10.5 | 1/2-20 UNF | 86 | 7 | 17 | 8 | 50 | 6.6 | 11Depth8 | NPT1/4" | 10.5 | 71 | 22 |
| | 75, 100 | 48.5 | 40.5 | | | | 14 | | | | | 18 | | | | | | | |
| | 125, 150 | 73.5 | 55.5 | | | | 18 | | | | | | | | | | | | |
| $\phi 63$ (2 1/2 Nom.) | 10~50 | 44 | 36 | 15 | 20 | 77 | 10.5 | 1/2-20 UNF | 103 | 7 | 17 | 8 | 60 | 9 | 14Depth10.5 | NPT1/4" | 15 | 84 | 22 |
| | 75, 100 | 54 | 46 | | | | 16.5 | | | | | 18 | | | | | | | |
| | 125, 150 | 75 | 57 | | | | 18 | | | | | | | | | | | | |
| $\phi 80$ (3 1/4 Nom.) | 10~50 | 53.5 | 43.5 | 21 | 25 | 98 | 12.5 | 5/8-18 UNF | 132 | 6 | 22 | 10 | 77 | 11 | 17.5Depth13.5 | NPT3/8" | 16 | 104 | 26 |
| | 75, 100 | 63.5 | 53.5 | | | | 19 | | | | | 20 | | | | | | | |
| | 125, 150 | 86 | 66 | | | | 20 | | | | | | | | | | | | |
| $\phi 100$ (4 Nom.) | 10~50 | 65 | 53 | 27 | 30 | 117 | 13 | 3/4-16 UNF | 156 | 6.5 | 27 | 12 | 94 | 11 | 17.5Depth13.5 | NPT3/8" | 23 | 123.5 | 26 |
| | 75, 100 | 75 | 63 | | | | 22 | | | | | | | | | | | | |
| | 125, 150 | 97.5 | 75.5 | | | | 22 | | | | | | | | | | | | |

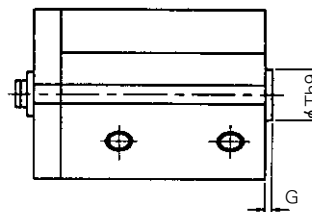
Double Acting/Non-Rotating Piston Rod/Single Rod Type : Dimensions

Bore Size : $\phi 20 \sim \phi 25$ ($3/4$ Nom. ~ 1 Nom.)

For the dimension of "A" type (Both Ends Tapped) Please refer to Page A-205.



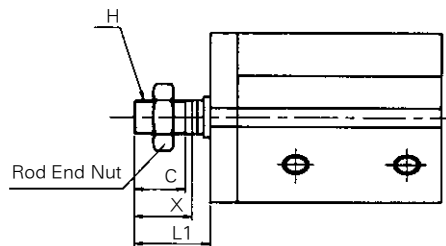
Rear Boss Mount



Rear Boss Mount (mm)

| Bore Size mm (inch) | G | Th9 |
|-------------------------|---|--|
| $\phi 20$ ($3/4$ Nom.) | 2 | $13 \begin{smallmatrix} 0 \\ -0.043 \end{smallmatrix}$ |
| $\phi 25$ (1 Nom.) | 2 | $15 \begin{smallmatrix} 0 \\ -0.043 \end{smallmatrix}$ |

Rod End Male Thread



Rod End Male Thread (mm)

| Bore Size mm (inch) | C | H | L1 | X |
|-------------------------|----|------------|------|------|
| $\phi 20$ ($3/4$ Nom.) | 12 | #10-32 UNF | 18.5 | 14 |
| $\phi 25$ (1 Nom.) | 15 | 1/4-28 UNF | 22.5 | 17.5 |

Standard Type

| Bore size mm (inch) | Stroke range mm | A | B | C | D | E | F | G | H | K | L | M | N | Q | R | S | V |
|-------------------------|-----------------|------|------|----|----|----|-----|---|------------|----|-----|----|-----|----|------|------|----|
| $\phi 20$ ($3/4$ Nom.) | 5~50 | 32 | 27.5 | 7 | 10 | 47 | 5.5 | 2 | #10-32 UNF | 8 | 4.5 | 36 | 5.5 | 17 | 48 | 24.5 | 36 |
| $\phi 25$ (1 Nom.) | 5~50 | 35.5 | 30.5 | 12 | 12 | 52 | 5.5 | 2 | 1/4-28 UNF | 10 | 5 | 40 | 5.5 | 19 | 53.5 | 27.5 | 40 |

ACP

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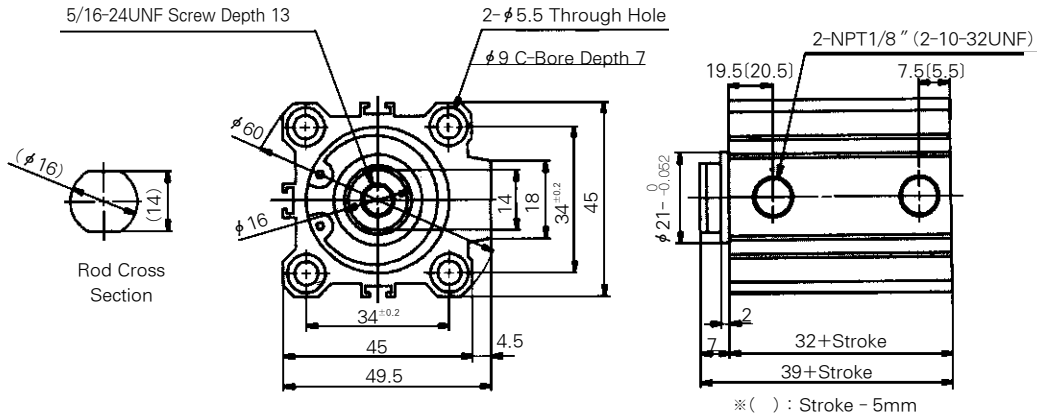
W~

Series UAQK

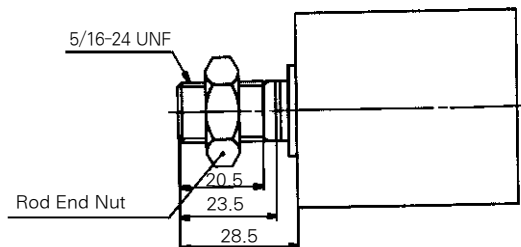
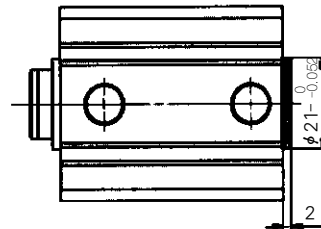
Double Acting/Non-Rotating Rod/Single Rod Type : Dimensions

Bore Size : $\phi 32$ (1 1/4 Nom.)

For the dimension of "A" type (Both Ends Tapped) Please refer to Page A-205.



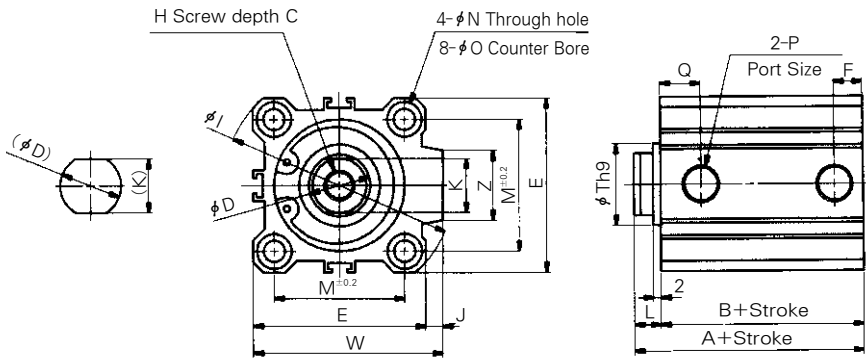
Rear Boss Mount



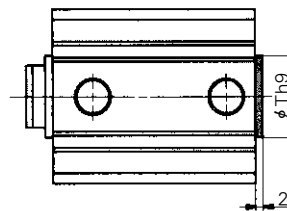
Double Acting/Non-Rotating Piston Rod/Single Rod Type : Dimensions

Bore Size : $\phi 40 \sim \phi 63$ (1 1/2 Nom. ~ 2 1/2 Nom.)

For the dimension of "A" type (Both Ends Tapped) Please refer to Page A-205.



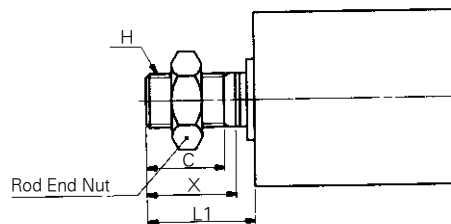
Rear Boss Mount



Rear Boss Mount (mm)

| Bore Size mm (inch) | Th9 |
|-----------------------|-------------------------------------|
| $\phi 40$ (1 1/2 Nom) | 28 ⁰ / _{-0.052} |
| $\phi 50$ (2 Nom) | 35 ⁰ / _{-0.062} |
| $\phi 63$ (2 1/2 Nom) | 35 ⁰ / _{-0.062} |

Rod End Male Thread



Rod End Male Thread (mm)

| Bore Size mm (inch) | C | H | L1 | X |
|-----------------------|------|------------|------|------|
| $\phi 40$ (1 1/2 Nom) | 20.5 | 3/8-24 UNF | 28.5 | 23.5 |
| $\phi 50$ (2 Nom) | 26 | 1/2-20 UNF | 33.5 | 28.5 |
| $\phi 63$ (2 1/2 Nom) | 26 | 1/2-20 UNF | 33.5 | 28.5 |

Standard Type

(Unit : mm)

| Bore size mm (inch) | Stroke range mm | A | B | C | D | E | F | H | I | J | K | L | M | N | φO | P | Q | Th9 | W | Z |
|-----------------------|-----------------|------|------|----|----|----|------|------------|-----|---|----|---|----|-----|-------------|---------|------|-------------------------------------|----|----|
| $\phi 40$ (1 1/2 Nom) | 5~50 | 36.5 | 29.5 | 13 | 16 | 52 | 8 | 3/8-24 UNF | 69 | 5 | 14 | 7 | 40 | 5.5 | 9Depth7 | NPT1/8" | 11 | 28 ⁰ / _{-0.052} | 57 | 18 |
| | 75, 100 | 46.5 | 39.5 | | | | | | | | | | | | | | | | | |
| $\phi 50$ (2 Nom) | 10~50 | 38.5 | 30.5 | 15 | 20 | 64 | 10.5 | 1/2-20 UNF | 86 | 7 | 18 | 8 | 50 | 6.6 | 11Depth8 | NPT1/4" | 10.5 | 35 ⁰ / _{-0.062} | 71 | 22 |
| | 75, 100 | 48.5 | 40.5 | | | | | | | | | | | | | | | | | |
| $\phi 63$ (2 1/2 Nom) | 10~50 | 44 | 36 | 15 | 20 | 77 | 10.5 | 1/2-20 UNF | 103 | 7 | 18 | 8 | 60 | 9 | 14Depth10.5 | NPT1/4" | 15 | 35 ⁰ / _{-0.062} | 84 | 22 |
| | 75, 100 | 54 | 46 | | | | | | | | | | | | | | | | | |

ACP

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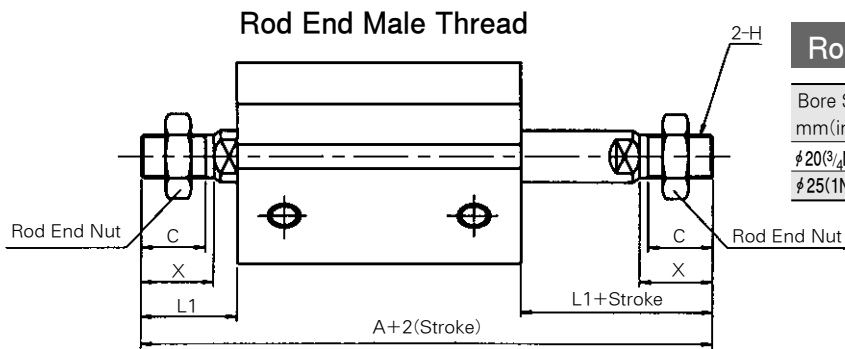
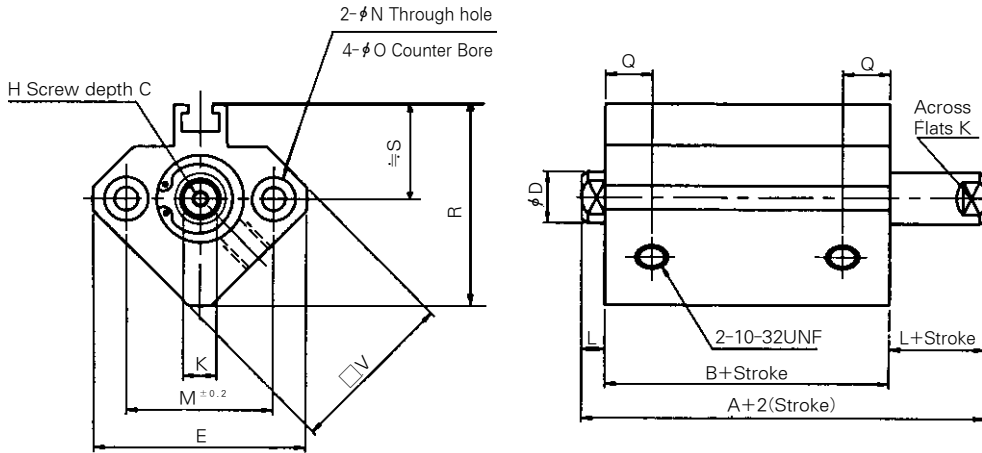
W~

Series UAQW

Double Acting/Double Rod Type : Dimensions

Bore Size : $\phi 20 \sim \phi 25$ ($3/4$ Nom. ~ 1 Nom.)

For the dimension of "A" type (Both Ends Tapped) Please refer to Page A-205.



Rod End Male Thread (mm)

| Bore Size mm (inch) | A | C | H | L1 | X |
|-------------------------|----|----|------------|------|------|
| $\phi 20$ ($3/4$ Nom.) | 63 | 12 | #10-32 UNF | 18.5 | 14 |
| $\phi 25$ (1 Nom.) | 74 | 15 | 1/4-28 UNF | 22.5 | 17.5 |

Standard Type

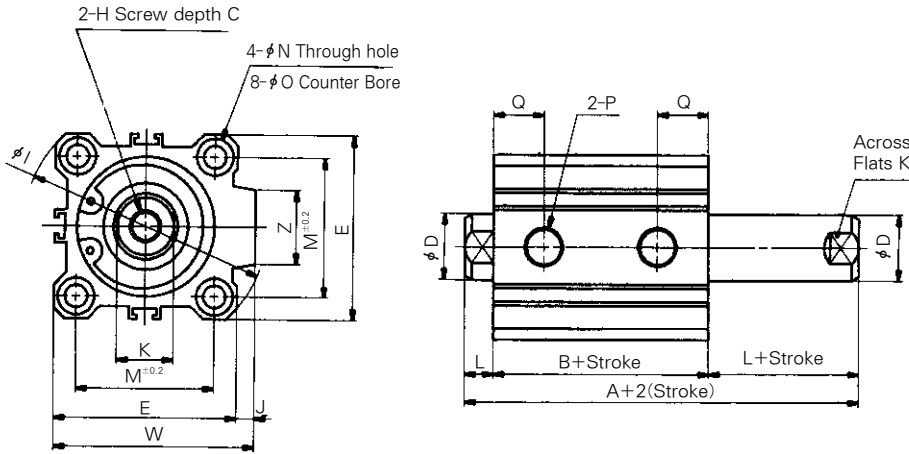
(Unit : mm)

| Bore size mm | Stroke range mm | A | B | C | D | E | H | K | L | M | N | ϕO | Q | R | S | $\square V$ |
|-------------------------|-----------------|----|----|----|----|----|------------|----|-----|----|-----|----------|-----|------|------|-------------|
| $\phi 20$ ($3/4$ Nom.) | 5~50 | 35 | 26 | 7 | 10 | 47 | #10-32 UNF | 8 | 4.5 | 36 | 5.5 | 9Depth7 | 9.5 | 48 | 24.5 | 36 |
| $\phi 25$ (1 Nom.) | 5~50 | 39 | 29 | 12 | 12 | 52 | 1/4-28 UNF | 10 | 5 | 40 | 5.5 | 9Depth7 | 11 | 53.5 | 27.5 | 40 |

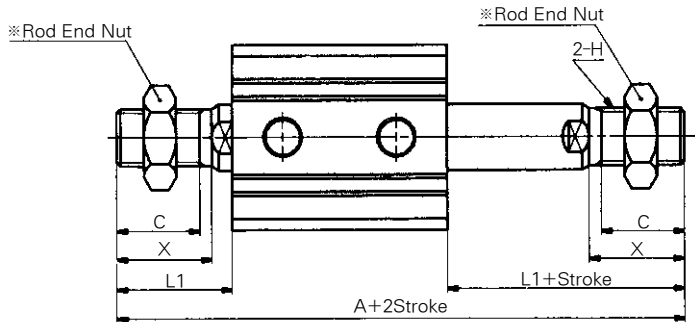
Double Acting/Double Rod Type : Dimensions

Bore Size : $\phi 32 \sim \phi 100$ (1/4 Nom. ~4 Nom.)

For the dimension of "A" type(Both Ends Tapped)
Please refer to Page A-205.



Rod End Male Thread



Rod End Male Thread (mm)

| Bore Size mm(inch) | A | C | H | L1 | X |
|-----------------------------------|-------|------|-------------|------|------|
| $\phi 32(1\frac{1}{4}\text{Nom})$ | 87.5 | 20.5 | 5/16-24 UNF | 28.5 | 23.5 |
| $\phi 40(1\frac{1}{2}\text{Nom})$ | 97 | 20.5 | 3/8-24 UNF | 28.5 | 23.5 |
| $\phi 50(2\text{Nom})$ | 107.5 | 26 | 1/2-20 UNF | 33.5 | 28.5 |
| $\phi 63(2\frac{1}{2}\text{Nom})$ | 109 | 26 | 1/2-20 UNF | 33.5 | 28.5 |
| $\phi 80(3\frac{1}{4}\text{Nom})$ | 138 | 32.5 | 5/8-18 UNF | 43.5 | 35.5 |
| $\phi 100(4\text{Nom})$ | 147.5 | 32.5 | 3/4-16 UNF | 43.5 | 35.5 |

Standard Type

(Unit : mm)

| Bore size mm(inch) | Stroke range mm | A | B | C | D | E | H | I | J | K | L | M | N | ϕO | P | Q | W | Z |
|-----------------------------------|--------------------|------|------|----|----|-----|-------------|-----|-----|----|----|----|-----|-------------|----------------------|------|-------|----|
| $\phi 32(1\frac{1}{4}\text{Nom})$ | 5~30 | 44.5 | 30.5 | 13 | 16 | 45 | 5/16-24 UNF | 60 | 4.5 | 14 | 7 | 34 | 5.5 | 9Depth7 | 10-32 UNF NPT1/8" | 12.5 | 49.5 | 18 |
| $\phi 40(1\frac{1}{2}\text{Nom})$ | 10~50 | 54 | 40 | 13 | 16 | 52 | 3/8-24 UNF | 69 | 5 | 14 | 7 | 40 | 5.5 | 9Depth7 | NPT1/8" | 14 | 57 | 18 |
| $\phi 50(2\text{Nom})$ | 10~50 | 56.5 | 40.5 | 15 | 20 | 64 | 1/2-20 UNF | 86 | 7 | 17 | 8 | 50 | 6.6 | 11Depth8 | NPT1/4" | 14 | 71 | 22 |
| $\phi 63(2\frac{1}{2}\text{Nom})$ | 10~50 | 58 | 42 | 15 | 20 | 77 | 1/2-20 UNF | 103 | 7 | 17 | 8 | 60 | 9 | 14Depth10.5 | NPT1/4" | 15.5 | 84 | 22 |
| $\phi 80(3\frac{1}{4}\text{Nom})$ | 10~50 | 71 | 51 | 21 | 25 | 98 | 5/8-18 UNF | 132 | 6 | 22 | 10 | 77 | 11 | 17Depth13.5 | NPT3/8" | 18 | 104 | 26 |
| $\phi 100(4\text{Nom})$ | 10~50 | 84.5 | 60.5 | 27 | 30 | 117 | 3/4-16 UNF | 156 | 6.5 | 27 | 12 | 94 | 11 | 17Depth13.5 | NPT3/8" | 22 | 123.5 | 26 |

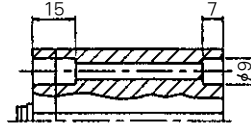
- ACP
- UACP
- AX
- AS
- AM
- AL
- ALX
- UARD
- UAQ
- AJ
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- UAG
- ADM
- ADR
- AMR
- UAMR
- AST
- W~

Series UAQKW

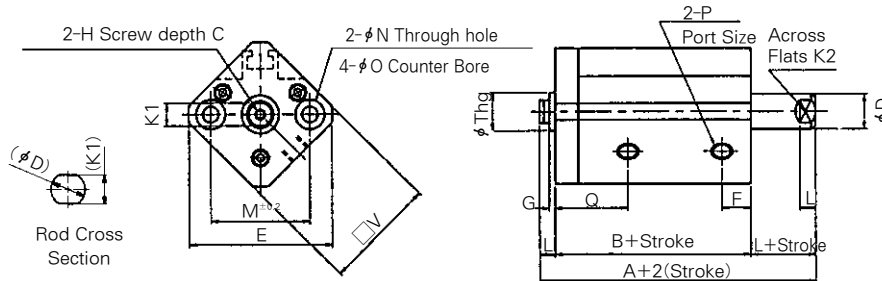
Double Acting/Non-Rotating Piston Rod/Double Rod Type : Dimensions

Bore Size : $\phi 20$ (3/4 Nom.) ~ $\phi 25$ (1 Nom.)

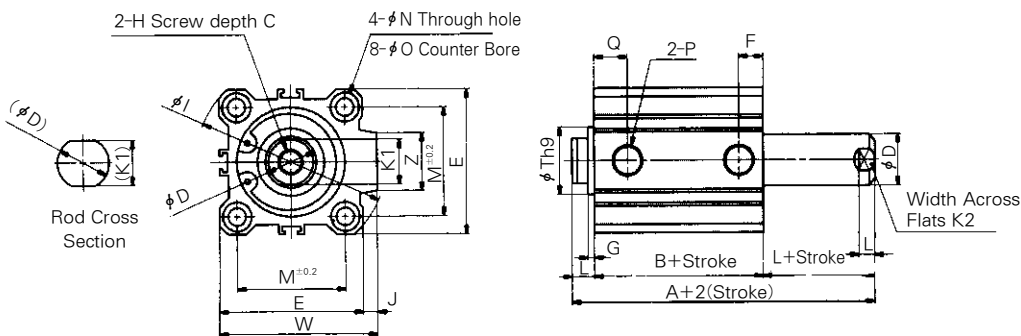
Through Hole



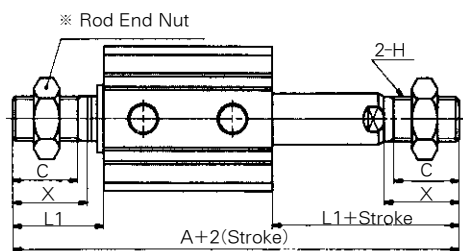
For the dimension of "A" type (Both Ends Tapped) Please refer to Page A-205.



Bore Size : $\phi 32$ (1 1/4 Nom.)



Rod End Male Thread



Rod End Male Thread (mm)

| Bore Size mm(inch) | A | C | H |
|------------------------|------|------|-------------|
| $\phi 20$ (3/4 Nom.) | 71 | 12 | #10-32 UNF |
| $\phi 25$ (1 Nom.) | 82 | 15 | 1/4-28 UNF |
| $\phi 32$ (1 1/4 Nom.) | 96.5 | 20.5 | 5/16-24 UNF |

| Bore Size mm(inch) | L1 | X |
|------------------------|------|------|
| $\phi 20$ (3/4 Nom.) | 18.5 | 14 |
| $\phi 25$ (1 Nom.) | 22.5 | 17.5 |
| $\phi 32$ (1 1/4 Nom.) | 28.5 | 23.5 |

Standard Type

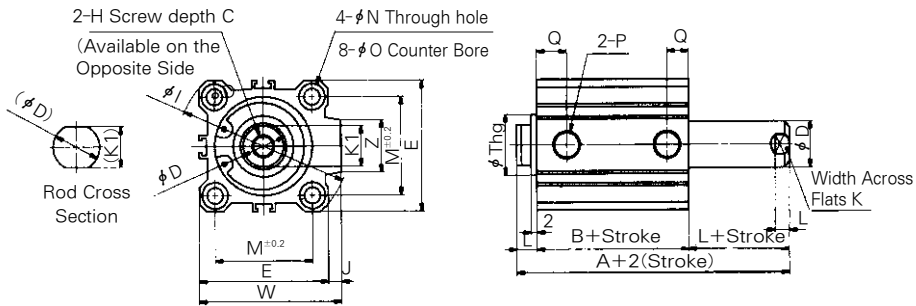
(Unit : mm)

| Bore size mm(inch) | Stroke range mm | A | B | C | D | E | F | G | H | I | J | K1 | K2 | L | M | N | P | Q | R | S | Th9 | W | Z | V |
|------------------------|-----------------|------|------|----|----|----|------|---|-------------|----|-----|----|----|-----|----|-----|-----------------------|------|------|------|----------------|------|----|----|
| $\phi 20$ (3/4 Nom.) | 5~50 | 43 | 34 | 7 | 10 | 47 | 9.5 | 2 | #10-32 UNF | - | - | 8 | 8 | 4.5 | 36 | 5.5 | 10-32 UNF | 17.5 | 48 | 24.5 | $13_{0.043}^0$ | - | - | 36 |
| $\phi 25$ (1 Nom.) | 5~50 | 47 | 37 | 12 | 12 | 52 | 11 | 2 | 1/4-28 UNF | - | - | 10 | 10 | 5 | 40 | 5.5 | 10-32 UNF | 19 | 53.5 | 27.5 | $15_{0.043}^0$ | - | - | 40 |
| $\phi 32$ (1 1/4 Nom.) | 5 10~75 | 53.5 | 39.5 | 13 | 16 | 45 | 12.5 | 2 | 5/16-24 UNF | 60 | 4.5 | 14 | 14 | 7 | 34 | 5.5 | 10-32 UNF NPT 1/8" | 21.5 | - | - | $21_{0.052}^0$ | 49.5 | 18 | - |

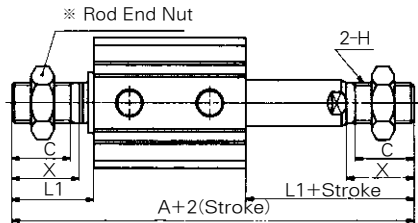
Double Acting/Non-Rotating Rod/Double Rod Type : Dimensions

Bore Size : $\phi 40 \sim \phi 63$ (1 1/2 Nom. ~ 2 1/2 Nom.)

For the dimension of "A" type (Both Ends Tapped) Please refer to Page A-205.



Rod End Male Thread



Rod End Male Thread (mm)

| Bore Size mm (inch) | A | C | H | L1 | X |
|-----------------------|-------|------|------------|------|------|
| $\phi 40$ (1 1/2 Nom) | 97 | 20.5 | 3/8-24 UNF | 28.5 | 23.5 |
| $\phi 50$ (2 Nom) | 107.5 | 26 | 1/2-20 UNF | 33.5 | 28.5 |
| $\phi 63$ (2 1/2 Nom) | 109 | 26 | 1/2-20 UNF | 33.5 | 28.5 |

Standard Type

(Unit : mm)

| Bore size mm (inch) | Stroke range mm | A | B | C | D | E | H | I | J | K1 | K2 | L | M | N | ϕO | P | Q | Thg | W | Z |
|-----------------------|-----------------|------|------|----|----|----|------------|-----|---|----|----|---|----|-----|-------------|---------|------|-----------------------------------|----|----|
| $\phi 40$ (1 1/2 Nom) | 5~75 | 54 | 40 | 13 | 16 | 52 | 3/8-24 UNF | 69 | 5 | 14 | 14 | 7 | 40 | 5.5 | 9Depth7 | NPT1/8" | 14 | 28 ⁰ _{-0.052} | 57 | 18 |
| $\phi 50$ (2 Nom) | 10~75 | 56.5 | 40.5 | 15 | 20 | 64 | 1/2-20 UNF | 86 | 7 | 18 | 17 | 8 | 50 | 6.6 | 11Depth8 | NPT1/4" | 14 | 35 ⁰ _{-0.062} | 71 | 22 |
| $\phi 63$ (2 1/2 Nom) | 10~75 | 58 | 42 | 15 | 20 | 77 | 1/2-20 UNF | 103 | 7 | 18 | 17 | 8 | 50 | 9 | 14Depth10.5 | NPT1/4" | 15.5 | 35 ⁰ _{-0.062} | 84 | 22 |

ACP

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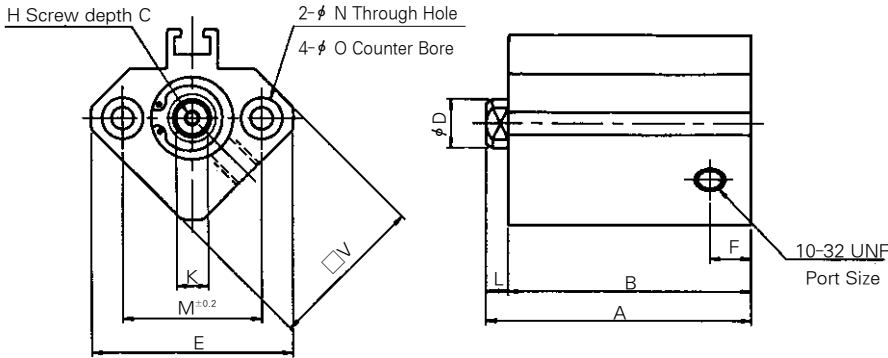
W~

Series UAQ

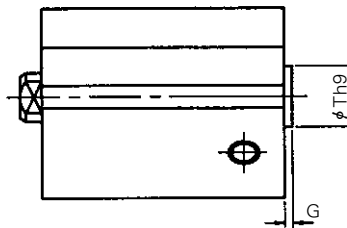
Single Acting/Spring Return Type : Dimensions

Bore Size : $\phi 20$ ($3/4$ Nom.)

For the dimension of "A" type (Both Ends Tapped) Please refer to Page A-205.



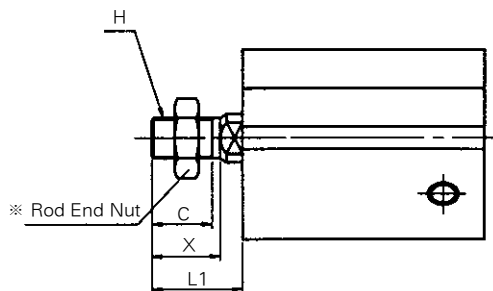
Rear Boss Mount



Rear Boss Mount (mm)

| Bore Size mm(inch) | G | Th9 |
|-------------------------|---|--|
| $\phi 20$ ($3/4$ Nom.) | 2 | $13 \begin{smallmatrix} 0 \\ -0.043 \end{smallmatrix}$ |

Rod End Male Thread



Rod End Male Thread (mm)

| Bore size mm(inch) | C | X | H | L1 |
|-------------------------|----|----|------------|------|
| $\phi 20$ ($3/4$ Nom.) | 12 | 14 | #10-32 UNF | 18.5 |

Standard Type

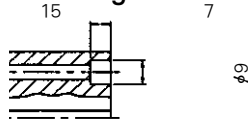
(Unit : mm)

| Bore size mm(inch) | A | | B | | C | D | E | F | H | K | L | M | N | ϕO | $\square V$ |
|-------------------------|-----|------|------|------|---|----|----|-----|------------|---|-----|----|-----|----------|-------------|
| | 5st | 10st | 5st | 10st | | | | | | | | | | | |
| $\phi 20$ ($3/4$ Nom.) | 29 | 34 | 24.5 | 29.5 | 7 | 10 | 47 | 5.5 | #10-32 UNF | 8 | 4.5 | 26 | 5.5 | 9Depth7 | 36 |

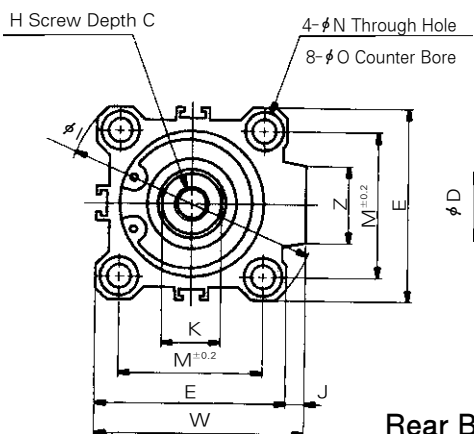
Single Acting/Single Rod/Spring Return Type : Dimensions

Bore Size : $\phi 32$ (1-1/4Nom.) ~ $\phi 50$ (2Nom.)

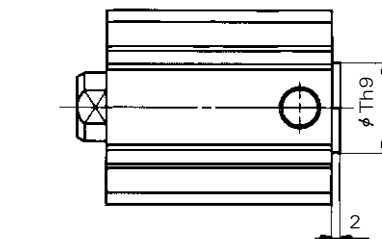
Through Hole



For the dimension of "A" type (Both Ends Tapped) Please refer to Page A-205.



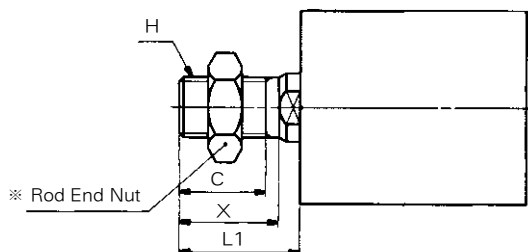
Rear Boss Mount



Rear Boss Mount (mm)

| Bore Size mm(inch) | Thg |
|------------------------------------|-------------------------------------|
| $\phi 32(1\frac{1}{4} \text{Nom})$ | 21 ⁰ / _{-0.052} |
| $\phi 40(1\frac{1}{2} \text{Nom})$ | 28 ⁰ / _{-0.052} |
| $\phi 50(2 \text{Nom})$ | 35 ⁰ / _{-0.062} |

Rod End Male Thread



Rod End Male Thread (mm)

| Bore Size mm(inch) | C | X | H | L1 |
|------------------------------------|------|------|-------------|------|
| $\phi 32(1\frac{1}{4} \text{Nom})$ | 20.5 | 23.5 | 5/16-24 UNF | 28.5 |
| $\phi 40(1\frac{1}{2} \text{Nom})$ | 20.5 | 23.5 | 3/8-24 UNF | 28.5 |
| $\phi 50(2 \text{Nom})$ | 26 | 28.5 | 1/2-20 UNF | 33.5 |

Standard Type

(Unit : mm)

| Bore Size mm(inch) | A | | B | | C | D | E | F | | H | I | J | K | L | M | N | ϕO | P | | W | Z |
|------------------------------------|------|------|------|------|----|----|----|-----|------|-------------|----|-----|----|---|----|-----|----------|-----------|---------|------|----|
| | 5st | 10st | 5st | 10st | | | | 5st | 10st | | | | | | | | | 5st | 10st | | |
| $\phi 32(1\frac{1}{4} \text{Nom})$ | 35 | 40 | 28 | 33 | 13 | 16 | 45 | 5.5 | 7.5 | 5/16-24 UNF | 60 | 4.5 | 14 | 7 | 34 | 5.5 | 9Depth7 | 10-32 UNF | NPT1/8" | 49.5 | 18 |
| $\phi 40(1\frac{1}{2} \text{Nom})$ | 41.5 | 46.5 | 34.5 | 39.5 | 13 | 16 | 52 | 8 | 8 | 3/8-24 UNF | 69 | 5 | 14 | 7 | 40 | 5.5 | 9Depth7 | NPT 1/8" | | 57 | 18 |
| $\phi 50(2 \text{Nom})$ | - | 48.5 | - | 40.4 | 15 | 20 | 64 | - | 10.5 | 1/2-20 UNF | 86 | 7 | 17 | 8 | 50 | 6.6 | 11Depth8 | - | NPT1/4" | 71 | 22 |

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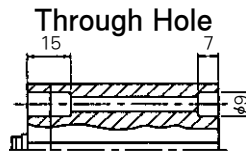
AST

W~

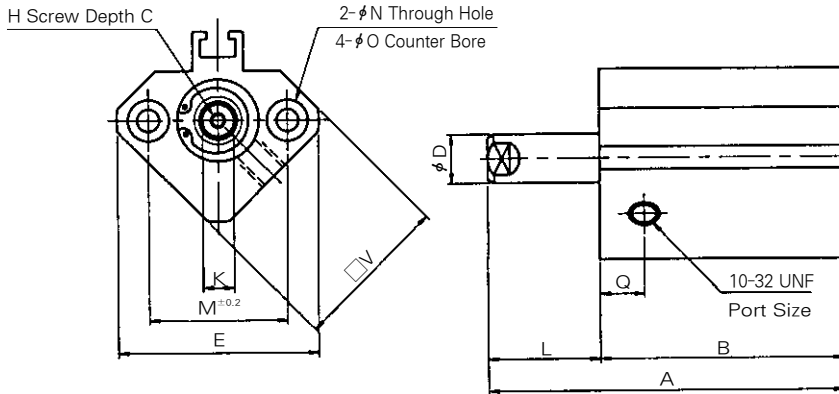
Series UAQ

Single Acting/Single Rod/Spring Extended Type : Dimensions

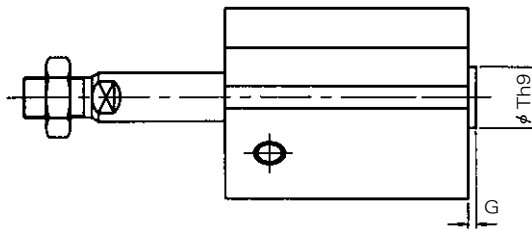
Bore Size : $\phi 20$ ($3/4$ Nom.)



For the dimension of "A" type (Both Ends Tapped) Please refer to Page A-205.



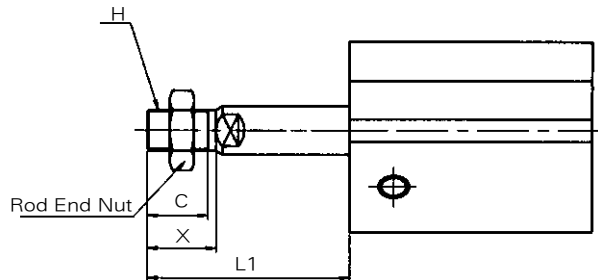
Rear Boss Mount



Rear Boss Mount (mm)

| Bore Size mm(inch) | G | Th9 |
|----------------------------|---|-----------------|
| $\phi 20(3/4 \text{ Nom})$ | 2 | $13_{-0.043}^0$ |

Rod End Male Thread



Rod End Male Thread (mm)

| Bore Size mm(inch) | C | X | H | L1 | |
|----------------------------|----|----|------------|------|------|
| | | | | 5st | 10st |
| $\phi 20(3/4 \text{ Nom})$ | 12 | 14 | #10-32 UNF | 23.5 | 28.5 |

Standard Type

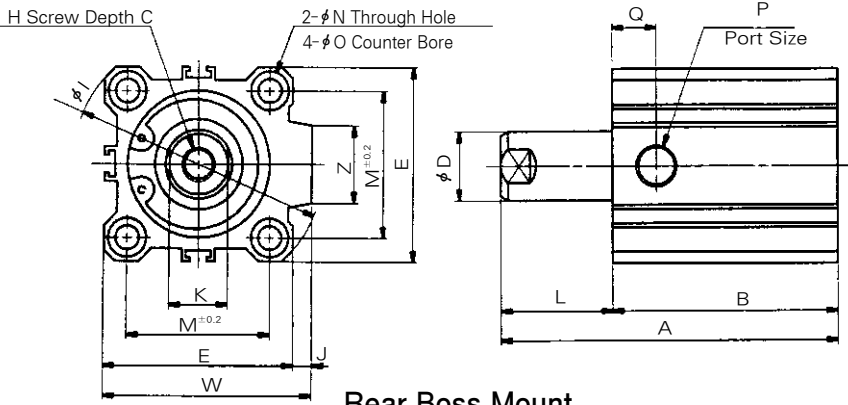
(Unit : mm)

| Bore Size mm(inch) | A | | B | | C | D | E | H | K | L | | M | N | ϕO | Q | $\square V$ |
|----------------------------|-----|------|------|------|---|----|----|------------|---|-----|------|----|-----|-----------|------|-------------|
| | 5st | 10st | 5st | 10st | | | | | | 5st | 10st | | | | | |
| $\phi 20(3/4 \text{ Nom})$ | 34 | 44 | 24.5 | 29.5 | 7 | 10 | 47 | #10-32 UNF | 8 | 9.5 | 14.5 | 36 | 5.5 | 9 Depth 7 | 10.5 | 36 |

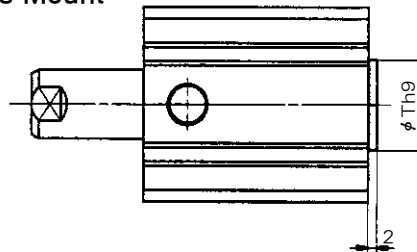
Single Acting/Single Rod/Spring Extended Type : Dimensions

Bore Size : $\phi 32(1\frac{1}{4}\text{Nom}) \sim \phi 50(2\text{Nom})$

For the dimension of "A" type(Both Ends Tapped)
Please refer to Page A-205.



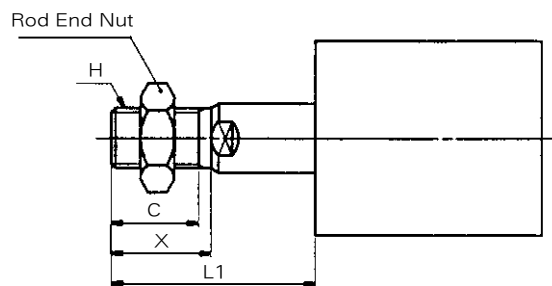
Rear Boss Mount



Rear Boss Mount (mm)

| Bore Size mm(inch) | Th9 |
|-----------------------------------|-----------------------------------|
| $\phi 32(1\frac{1}{4}\text{Nom})$ | 21 ⁰ _{-0.052} |
| $\phi 40(1\frac{1}{2}\text{Nom})$ | 28 ⁰ _{-0.052} |
| $\phi 50(2\text{Nom})$ | 35 ⁰ _{-0.062} |

Rod End Male Thread



Rod End Male Thread (mm)

| Bore Size mm(inch) | C | X | H | L1 | | |
|-----------------------------------|------|------|-------------|------|------|------|
| | | | | 5st | 10st | 20st |
| $\phi 32(1\frac{1}{4}\text{Nom})$ | 20.5 | 23.5 | 5/16-24 UNF | 33.5 | 38.5 | - |
| $\phi 40(1\frac{1}{2}\text{Nom})$ | 20.5 | 23.5 | 3/8-24 UNF | 33.5 | 38.5 | - |
| $\phi 50(2\text{Nom})$ | 26 | 28.5 | 1/2-20 UNF | - | 43.5 | 53.5 |

Standard Type

(Unit : mm)

| Bore Size mm(inch) | A | | B | | C | D | E | H | I | J | K | L | | M | N | ϕO | P | | Q | | W | Z |
|-----------------------------------|------|------|------|------|----|----|----|-------------|----|-----|----|-----|------|----|-----|------------|----------|---------|------|------|------|----|
| | 5st | 10st | 5st | 10st | | | | | | | | 5st | 10st | | | | 5st | 10st | 5st | 10st | | |
| $\phi 32(1\frac{1}{4}\text{Nom})$ | 40 | 50 | 28 | 33 | 13 | 16 | 45 | 5/16-24 UNF | 60 | 4.5 | 14 | 12 | 17 | 34 | 5.5 | 9 Depth 7 | 10-32UNF | NPT 1/8 | 11.5 | 10.5 | 49.5 | 18 |
| $\phi 40(1\frac{1}{2}\text{Nom})$ | 46.5 | 56.5 | 34.5 | 39.5 | 13 | 16 | 52 | 3/8-24 UNF | 69 | 5 | 14 | 12 | 17 | 40 | 5.5 | 9 Depth 7 | NPT 1/8 | 11 | 11 | 57 | 18 | |
| $\phi 50(2\text{Nom})$ | - | 58.5 | - | 40.5 | 15 | 20 | 64 | 1/2-20 UNF | 86 | 7 | 17 | - | 18 | 50 | 6.6 | 11 Depth 8 | - | NPT 1/4 | - | 10.5 | 71 | 22 |

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