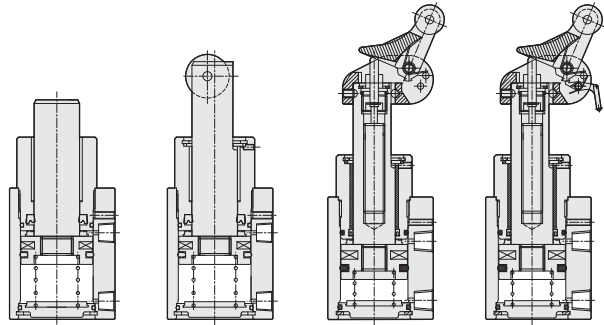
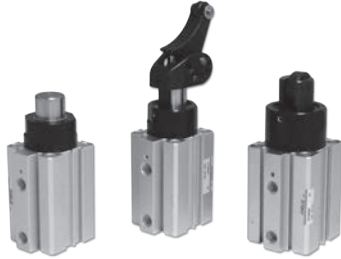


STB (C,D) series - Stopper cylinder

Operating specification and Ordering expression

CHELIC PNEUMATIC

Internal structure



STB
Stopper
Cylinder

STC
Stopper
Cylinder

STD
Stopper
Cylinder

STDL
Stopper
Cylinder

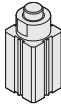
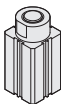
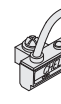
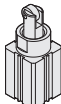
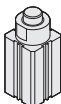
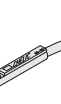

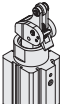
STF
Stopper
Cylinder

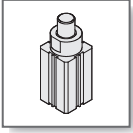
Specification

| Item | Bore size (mm) | Ø32 | Ø40 | Ø50 |
|-------------------------------------|---------------------------|------------------------|----------|----------|
| Operation | | Double / Single acting | | |
| Fluid | | Air | | |
| Pressure range | kgf/cm ² (kpa) | 1.5 ~ 9.5 (150 ~ 950) | | |
| Operating ambient temperature range | °C | 0 ~ 60 | | |
| Range of service speed | mm/sec | 30 ~ 500 | | |
| Stroke | mm | 10,15,20 | 20,25,30 | 20,25,30 |
| Cushion | | Rubber washer | | |
| Lubrication | | Lubrication free | | |
| Port size | | Rc 1/8 | Rc 1/8 | Rc 1/4 |
| Sensing device | | With magnet | | |

How to order

ST B – **32** × **10** – **D** – **SE 2**

| | | | | |
|---|---|---|--|--|
| Model | Bore size | Stroke | Operation type | Sensor switch |
|  STB | 32 – Ø32 mm 40 – Ø40 mm 50 – Ø50 mm | Ø32 - 10,15,20 mm Ø40 - 20,25,30 mm Ø50 - 20,25,30 mm |  D D: Double acting |  SE 2 SE: Sensor switch code (CS-30E) 2: Number of sensor switch 1 = 1 PCS 2 = 2 PCS |
|  STC STC: Stopper cylinder | | |  R R: Single acting (Spring extend) |  SD 2 SD: Sensor switch code (CS-9D) SB: Sensor switch code (CS-9B) 2: Number of sensor switch 1 = 1 PCS 2 = 2 PCS |
|  STD STD: Stopper cylinder |  STDL STDL: Stopper cylinder | | | |

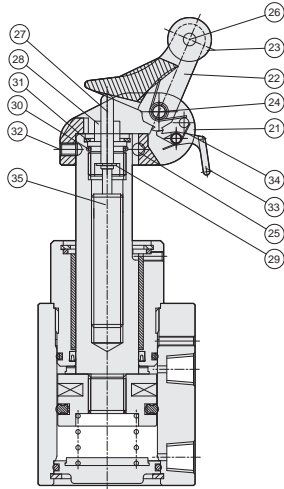


STB (C,D) series - Stopper cylinder

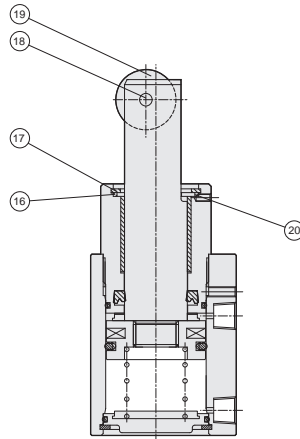
Components and Material list

CHELIC PNEUMATIC

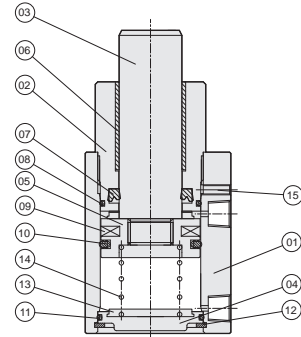
Internal structure



● STD



● STC



● STB

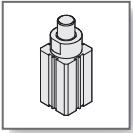
Material of major parts list

| No. | Item | Material | No. | Item | Material |
|-----|-----------------------|---------------------|-----|-----------------------|---------------------|
| 01 | Body | Aluminum alloy | 19 | Roller | Medium carbon steel |
| 02 | Front cover | Aluminum alloy | 20 | Screw | Alloy steel |
| 03 | Rod | Medium carbon steel | 21 | Lever body | Alloy steel |
| 04 | End cover | Aluminum alloy | 22 | Lever | Alloy steel |
| 05 | Piston | Brass | 23 | Roller | Medium carbon steel |
| 06 | Bearing | Teflon | 24 | Roller pin | Bearing steel |
| 07 | Rod packing | NBR | 25 | Roller pin | Bearing steel |
| 08 | Front cover O-ring | NBR | 26 | Roller pin | Bearing steel |
| 09 | Magnet | Rubber | 27 | Front rod | Medium carbon steel |
| 10 | Piston packing | NBR | 28 | Cushion mounting base | Copper |
| 11 | End cover O-ring | NBR | 29 | E-ring | Spring steel |
| 12 | Snap ring | Spring steel | 30 | O-ring | NBR |
| 13 | Cushion rubber lining | Rubber | 31 | Snap ring | Spring steel |
| 14 | Spring | Spring steel | 32 | Mounting screw | Alloy steel |
| 15 | Mounting screw | Alloy steel | 33 | Rod guide | Alloy steel |
| 16 | Rod guide | Stainless steel | 34 | Spring | Spring steel |
| 17 | Snap ring | Spring steel | 35 | Shock absorber | Medium carbon steel |
| 18 | Roller pin | Bearing steel | | | |

Packing and O-ring

Unit:mm

| Item | Rod packing | Front cover O-ring | Piston packing | End cover O-ring |
|--------|-------------|--------------------|----------------|------------------|
| Number | 1 | 1 | 1 | 1 |
| Ø32 | DYR - 20 | Ø28.5 x Ø2 | COP-32 | Ø32 x Ø2 |
| Ø40 | UP - 25 | Ø36 x Ø2 | COP-40 | Ø38.5 x Ø2 |
| Ø50 | UP - 25 | Ø47.5 x Ø2 | COP-50 | Ø48 x Ø2 |

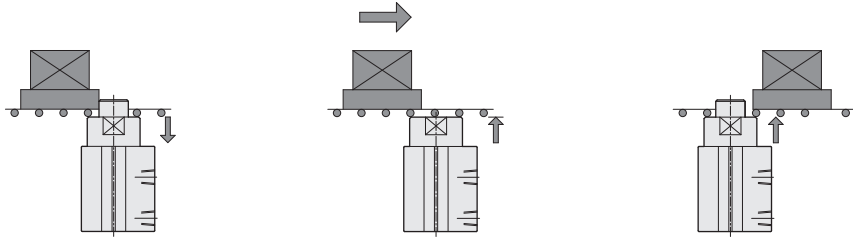
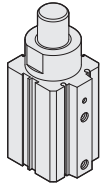


STB (C,D) series - Stopper cylinder

Mounting type and Application expression

CHELIC PNEUMATIC

STB Application



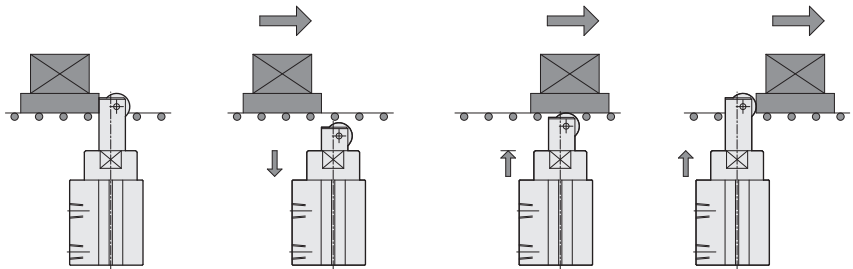
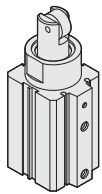
● STB series

● Stop

● Rod falls pallet passed

● Cylinder return

STC Application



● STC series

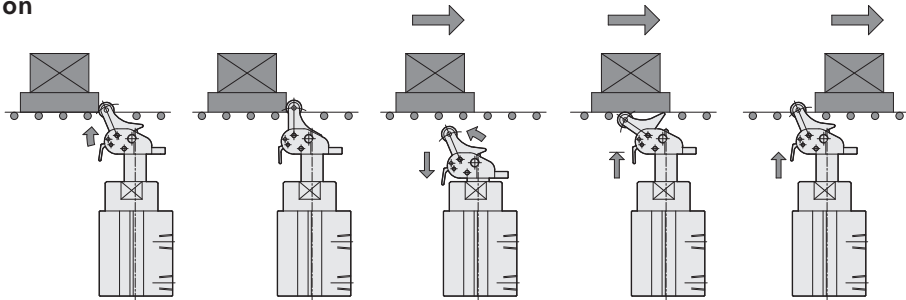
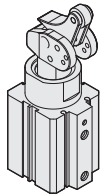
● Stop

● Rod falls

● pallet passed

● Cylinder return

STD Application



● STD series

● Stop / Slow the pallet

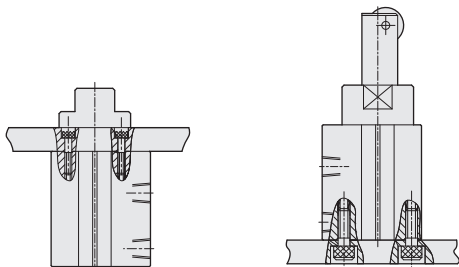
● Stop

● Rod falls pallet passed

● Pallet passed level off

● Cylinder return

Mounting type

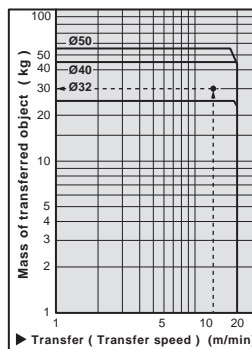


● Upper mounting type

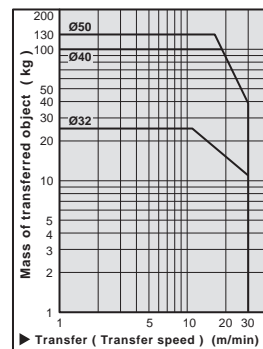
● Base mounting type

Strike force allowable

● STB、STC



● STD、STDL



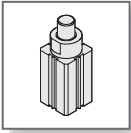
STB
Stopper
Cylinder

STC
Stopper
Cylinder

STD
Stopper
Cylinder

STDL
Stopper
Cylinder

STF
Stopper
Cylinder

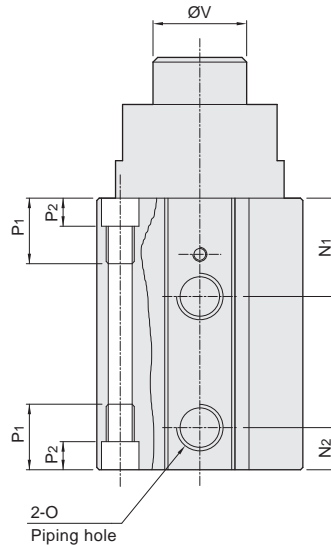
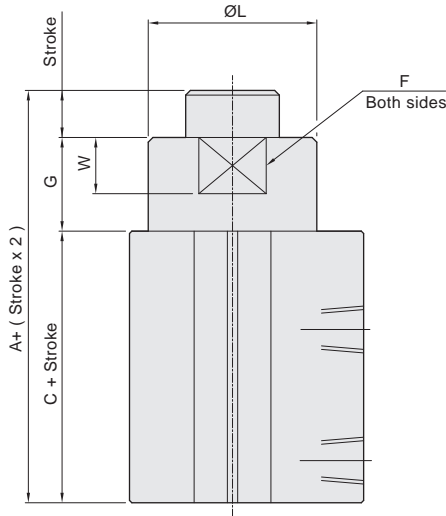
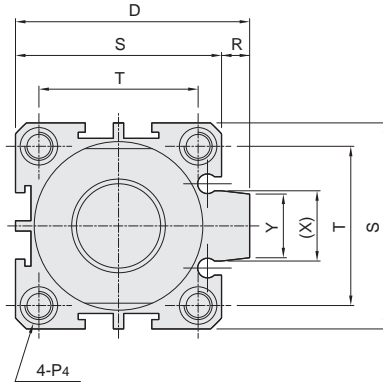


STB series - Stopper cylinder

External dimension

CHELIC PNEUMATIC

STB Ø32, Ø40, Ø50



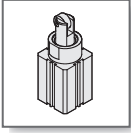
Dimension

Unit : mm

| Bore size | A | C | D | F | G | L | N ₁ | N ₂ | O | R | S | T | Y |
|-----------|------|------|----|----|----|----|----------------|----------------|--------|---|----|----|------|
| Ø32 | 68 | 48 | 50 | 33 | 20 | 36 | 21 | 9 | PT 1/8 | 6 | 44 | 34 | 13.6 |
| Ø40 | 80.2 | 52.2 | 58 | 41 | 28 | 44 | 24.6 | 10 | PT 1/8 | 6 | 52 | 40 | 13.6 |
| Ø50 | 82 | 54 | 72 | 50 | 28 | 56 | 24 | 10.8 | PT 1/4 | 8 | 64 | 50 | 19 |

Unit : mm

| Bore size | P ₄ | P ₁ | P ₂ | V | W | X |
|-----------|--|----------------|----------------|----|----|------|
| Ø32 | Thru-hole Ø4.8 · Thread M6 x 1 x 8 dp · Hole Ø8 x 6 dp : (Both sides) | 14 | 6 | 20 | 12 | 15 |
| Ø40 | Thru-hole Ø6.8 · Thread M8 x 1.25 x 10 dp · Hole Ø9.5 x 8 dp : (Both sides) | 18 | 8 | 25 | 15 | 15 |
| Ø50 | Thru-hole Ø6.8 · Thread M8 x 1.25 x 10 dp · Hole Ø11 x 8.5 dp : (Both sides) | 18.5 | 8.5 | 25 | 15 | 21.6 |

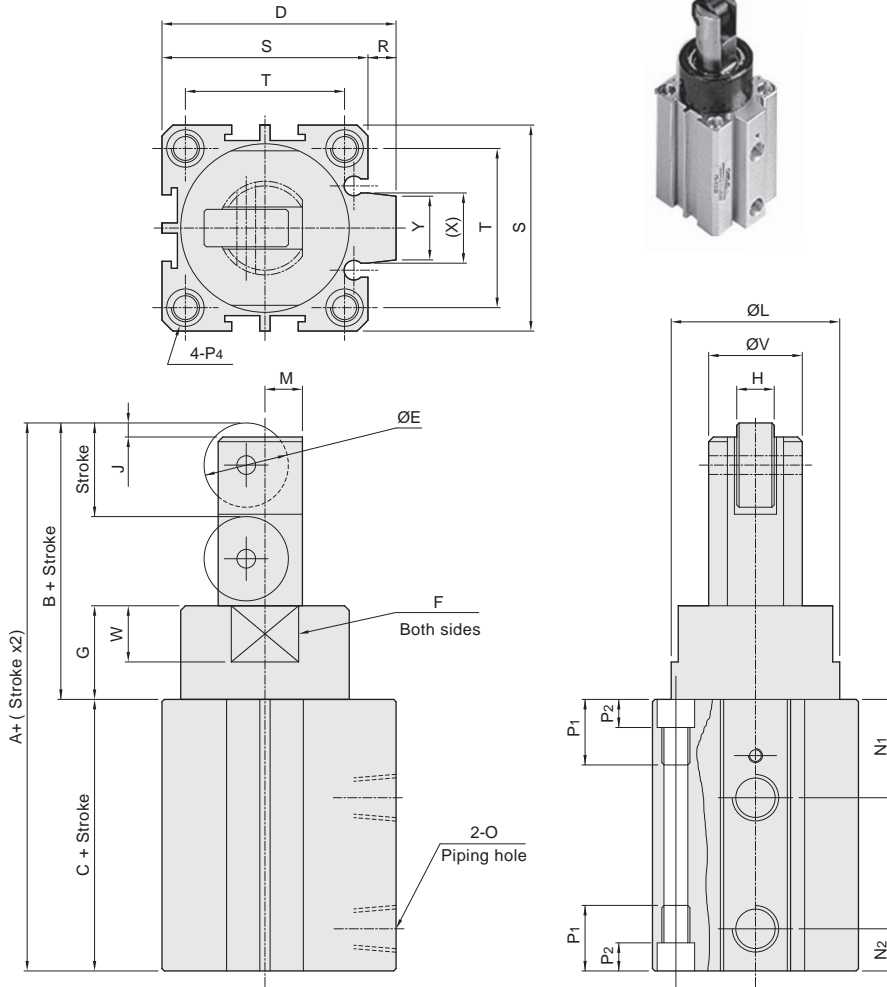


STC series - Stopper cylinder

External dimension

CHELIC PNEUMATIC

STC Ø32,Ø40,Ø50



STB
Stopper
Cylinder

STC
Stopper
Cylinder

STD
Stopper
Cylinder

STDL
Stopper
Cylinder

STF
Stopper
Cylinder

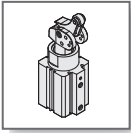
Dimension

Unit : mm

| Bore size | A | B | C | D | E | F | G | H | J | L | M | N ₁ | N ₂ | O | R | S |
|-----------|-------|----|------|----|----|----|----|---|---|----|----|----------------|----------------|--------|---|----|
| Ø32 | 87 | 39 | 48 | 50 | 18 | 33 | 20 | 8 | 3 | 36 | 8 | 21 | 9 | PT 1/8 | 6 | 44 |
| Ø40 | 105.2 | 53 | 52.2 | 58 | 24 | 41 | 28 | 9 | 4 | 44 | 10 | 24.6 | 10 | PT 1/8 | 6 | 52 |
| Ø50 | 107 | 53 | 54 | 72 | 24 | 50 | 28 | 9 | 4 | 56 | 10 | 24 | 10.8 | PT 1/4 | 8 | 64 |

Unit : mm

| Bore size | P4 | | | | | | P ₁ | P ₂ | T | V | W | X | Y |
|-----------|--|--|--|--|--|--|----------------|----------------|----|----|----|------|------|
| Ø32 | Thru-hole Ø4.8 · Thread M6 x 1 x 8 dp · Hole Ø8 x 6 dp : (Both sides) | | | | | | 14 | 6 | 34 | 20 | 12 | 15 | 13.6 |
| Ø40 | Thru-hole Ø6.8 · Thread M8 x 1.25 x 10 dp · Hole Ø9.5 x 8 dp : (Both sides) | | | | | | 18 | 8 | 40 | 25 | 15 | 15 | 13.6 |
| Ø50 | Thru-hole Ø6.8 · Thread M8 x 1.25 x 10 dp · Hole Ø11 x 8.5 dp : (Both sides) | | | | | | 18.5 | 8.5 | 50 | 25 | 15 | 21.6 | 19 |

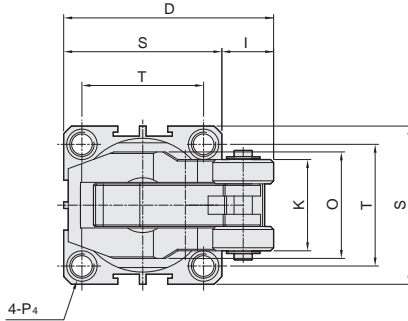


STD series - Stopper cylinder

External dimension

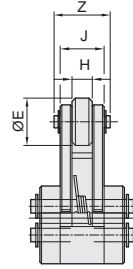
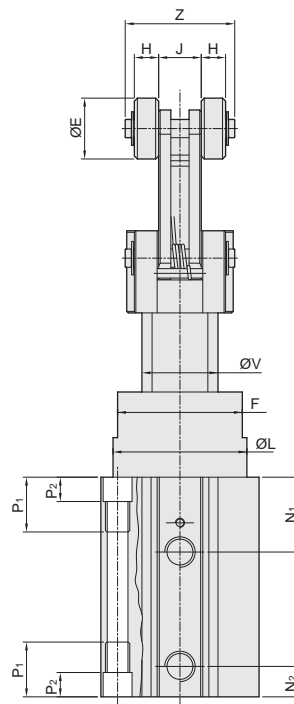
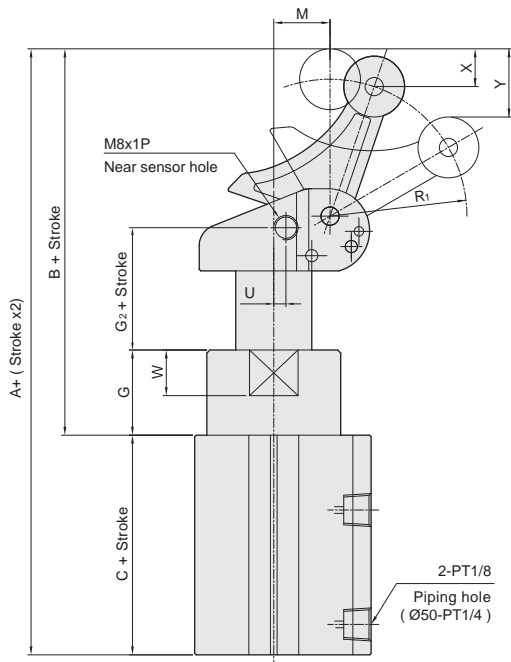
CHELIC PNEUMATIC

STD Ø32, Ø40, Ø50



STD Ø40, Ø50

STD Ø32



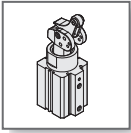
Dimension

Unit : mm

| Bore size | A | B | C | D | E | F | G | G ₂ | H | I | J | K | L | M | N ₁ | N ₂ | O | S | T |
|-----------|-------|-------|------|------|----|----|----|----------------|---|------|----|----|----|------|----------------|----------------|----|----|----|
| Ø32 | 141 | 93 | 48 | 59.1 | 14 | 33 | 20 | 28.8 | 6 | 15.1 | 13 | — | 36 | 16.5 | 21 | 9 | 25 | 44 | 34 |
| Ø40 | 160.2 | 108 | 52.2 | 68.5 | 20 | 41 | 28 | 21.2 | 8 | 17 | 15 | 32 | 44 | 18.5 | 24.6 | 10 | 35 | 52 | 40 |
| Ø50 | 162.7 | 108.7 | 54 | 74.5 | 20 | 50 | 28 | 21.9 | 8 | 11 | 15 | 32 | 56 | 18.5 | 24 | 10.8 | 35 | 64 | 50 |

Unit : mm

| Bore size | P ₄ | P ₁ | P ₂ | V | U | W | X | Y | Z | R ₁ |
|-----------|--|----------------|----------------|----|---|----|------|------|------|----------------|
| Ø32 | Thru-hole Ø4.8 · Thread M6 x 1 x 8 dp · Hole Ø8 x 6 dp : (Both sides) | 14 | 6 | 20 | 3 | 12 | 9.7 | 17.8 | 18.4 | R35 |
| Ø40 | Thru-hole Ø6.8 · Thread M8x1.25x10 dp · Hole Ø9.5x8dp : (Both sides) | 18 | 8 | 25 | 4 | 15 | 12.4 | 22.4 | 38 | R45 |
| Ø50 | Thru-hole Ø6.8 · Thread M8x1.25x10 dp · Hole Ø11x 8.5dp : (Both sides) | 18.5 | 8.5 | 25 | 4 | 15 | 12.4 | 22.4 | 38 | R45 |

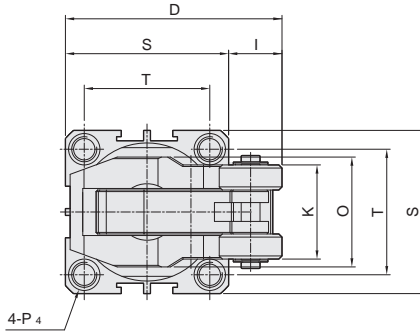


STDL series - Stopper cylinder

External dimension

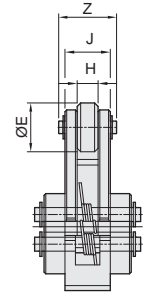
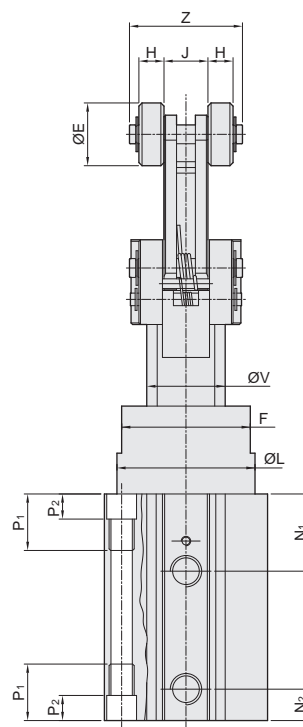
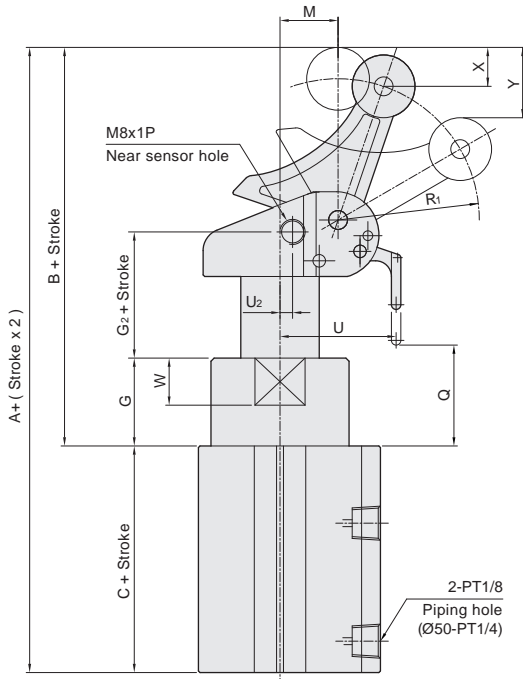
CHELIC PNEUMATIC

STDL Ø32,Ø40,Ø50



STDL Ø40, Ø50

STDL Ø32



STB

Stopper
Cylinder

STC

Stopper
Cylinder

STD

Stopper
Cylinder

STDL

Stopper
Cylinder

STF

Stopper
Cylinder

Dimension

Unit : mm

| Bore size | A | B | C | D | E | F | G | G ₂ | H | I | J | K | L | M | N ₁ | N ₂ | O | S | T | V |
|-----------|-------|-------|------|------|----|----|----|----------------|---|------|----|----|----|------|----------------|----------------|----|----|----|----|
| Ø32 | 141 | 93 | 48 | 59.1 | 14 | 33 | 20 | 28.8 | 6 | 15.1 | 13 | — | 36 | 16.5 | 21 | 9 | 25 | 44 | 34 | 20 |
| Ø40 | 160.2 | 108 | 52.2 | 68.5 | 20 | 41 | 28 | 21.2 | 8 | 17 | 15 | 31 | 44 | 18.5 | 24.6 | 10 | 35 | 52 | 40 | 25 |
| Ø50 | 162.7 | 108.7 | 54 | 74.5 | 20 | 50 | 28 | 21.9 | 8 | 11 | 15 | 31 | 56 | 18.5 | 24 | 10.8 | 35 | 64 | 50 | 25 |

Unit : mm

| Bore size | P ₄ | P ₁ | P ₂ | Q | U | U ₂ | W | X | Y | Z | R ₁ |
|-----------|--|----------------|----------------|------|------|----------------|----|------|------|------|----------------|
| Ø32 | Thru-hole Ø4.8 · Thread M6 x 1 x 8 dp · Hole Ø8 x 6 dp · (Both sides) | 14 | 6 | 30.8 | 29.4 | 3 | 12 | 9.7 | 17.8 | 18.4 | R35 |
| Ø40 | Thru-hole Ø6.8 · Thread M8x1.25x10 dp · Hole Ø9.5x8dp · (Both sides) | 18 | 8 | 25 | 37 | 4 | 15 | 12.4 | 22.4 | 38 | R45 |
| Ø50 | Thru-hole Ø6.8 · Thread M8x1.25x10 dp · Hole Ø11x 8.5dp · (Both sides) | 18.5 | 8.5 | 26 | 37 | 4 | 15 | 12.4 | 22.4 | 38 | R45 |