

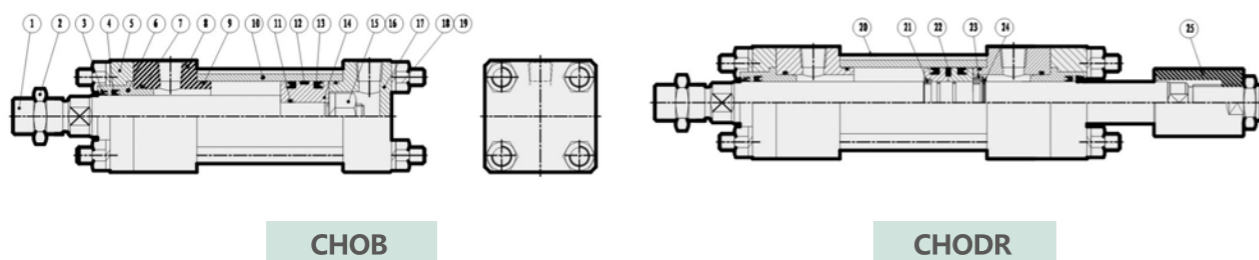
CHO

系列重型油壓缸

CHO SERIES HYDRAULIC CYLINDER



重型油壓缸結構圖 INSIDE STRUCTURE



| NO | 零件名 Part name | 數量 Quantity | NO | 零件名 Part name | 數量 Quantity | NO | 零件名 Part name | 數量 Quantity |
|----|-------------------------|-------------|------|--------------------|-------------|----|----------------------|-------------|
| 1 | 活塞桿 Piston rod | 1 | 9,11 | O型圈 Gasket | 3 | 18 | 螺母 nut | 8 |
| 2 | 鎖緊螺母 Locking nut | 1 | 10 | 缸筒 Cylinder tube | 1 | 19 | 彈性墊圈 Spring washer | 8 |
| 3 | 防塵油封 Dustproof seal | 1 | 12 | 耐磨環 Wearing ring | 1 | 20 | 拉桿 Tie rod | 4 |
| 4 | 軸用油封 Oil seal for shaft | 1 | 13 | 活塞油封 Piston seal | 2 | 21 | 半卡環 Half snap ring | 2 |
| 5 | 壓蓋 Gland | 1 | 14 | 活塞 Piston | 1 | 22 | 磁環 Magnet ring | 1 |
| 6 | 導向套 Guide sleeve | 1 | 15 | 螺母 Nut | 1 | 23 | 擋環 Baffle ring | 1 |
| 7 | O型圈 Gasket | 1 | 16 | 彈性墊圈 Spring washer | 1 | 24 | 軸用擋圈 Rod baffle ring | 1 |
| 8 | 前端蓋 Rod cover | 1 | 17 | 後端蓋 End cover | 1 | 25 | 可調螺母 Adjustable nut | 1 |

重型油壓缸特性資料 Specification

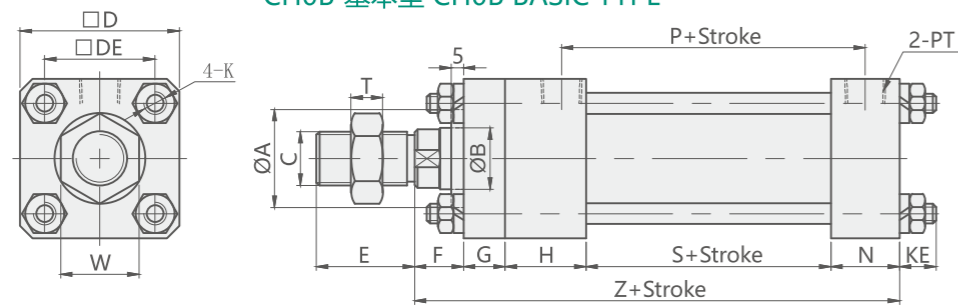
| | | | | | | | | | |
|---|---|-----|-----|-----|------|------|------|------|------|
| 油缸內徑 Hydraulic cylinder inside diameter(mm) | Φ40 | Φ50 | Φ63 | Φ80 | Φ100 | Φ125 | Φ150 | Φ180 | Φ200 |
| 工作流體 Power Fluid | 以濾清之標準液壓油 Filtered Oil | | | | | | | | |
| 缸管材質 Material of cylinder barrel | 碳鋼管 Carbon steel STKM-13c/白鐵管 Stainless tubes SUS 304 | | | | | | | | |
| 使用壓力範圍 The range of pressure(mpa) | 0.3-14 MPA(3-140kg/Cm ²) | | | | | | | | |
| 使用速度範圍 The range of speed (mm/sec) | 8~300(mm/sec) | | | | | | | | |
| 使用溫度範圍 Range of temperature(°C) | -10 ~ + 60 (°C) | | | | | | | | |
| 緩衝行程 Cushion stroke(mm) | 25 | 25 | 25 | 30 | 35 | 40 | 45 | 50 | 55 |
| 標準活塞長度 Length of standard piston (PM) | 30 | 35 | 35 | 50 | 60 | 70 | 60 | 70 | 70 |
| 訂製行程於1501-2500mm間活塞長度 (PM) Piston length when the stroke is between 1501-2500 mm | 60 | 70 | 70 | 80 | 100 | 100 | 100 | 140 | 140 |
| 訂製行程於2501-4000mm間活塞長度 (PM) Piston length when the stroke is between 2501-4000 mm | 120 | 140 | 140 | 150 | 180 | 180 | 180 | 200 | 200 |

訂購標示法 ORDERING INDICATION

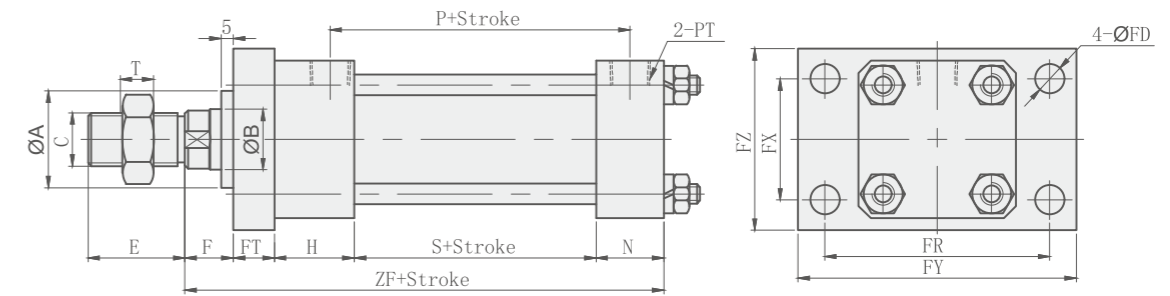
示例: CHOB-R-D-63/35-100-LB-Y

| CHOB | 系列 Series | CHOB 標準型 Standard type | CHOD 雙軸型 Double Rods type |
|------|---|--|--|
| R | 磁性感應 Magnetic | 無記號: 不附磁石 Blank: No magnet R: 內附磁石 (適用Φ40-Φ100) With magnet | 本系列適用Φ40-Φ100 apply to bore Φ40-Φ100 |
| D | 緩衝型式 Fixed Cushioning Type | 無記號: 無 Blank: No cushion D: 雙側緩衝 cushions on both ends F: 前蓋側緩衝 cushion on head cover B: 後蓋側緩衝 cushion on end cover | |
| 63 | 油缸內徑 Hydraulic cylinder inside diameter | Φ40 , Φ50 , Φ63 , Φ80 , Φ100 , Φ125 , Φ150 , Φ180 , Φ200 | |
| 35 | 軸心 Rod | 標準 Standard Φ25 Φ30 Φ35 Φ40 Φ50 Φ60 Φ80 Φ100 Φ100 無記號: 標準軸心 最大 Max - Φ35 Φ40 Φ50 Φ60 Φ80 Φ100 Φ120 Φ120 Blank: standard rod | |
| 100 | 行程 Stroke | 鋼管 Steel barrel (Φ40-Φ125) 最大行程: 4米 Max:4m 白鋼管 Iron barrel (Φ40-Φ100) 最大行程: 2.8米 Max:2.8m 標準行程 Standard stroke: 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800, 900, 1000. | |
| LB | 缸體固定型式 Accessories for body | FA 前法蘭型 Front flange FB 後法蘭 Rear flange LB 腳座型 Foot mount TC 耳軸型 Trunnion type LA 腳座型 Foot type | CA 單耳型 Single trunnion CB 雙耳型 Double trunnion CBP CB附Pin CB with pin CAB CA+P+CB |
| Y | 軸心固定型式 Accessories for rod | Y Y型接頭 Y joint YP Y+Pin Y with pin I I型接頭 I joint KG 浮動接頭 Floating joint | PHS 魚眼接頭 Rod-eye joint T T型接頭 T joint H 焊套接頭 Welding sleeve joint A 可調螺帽 Adjustable nut |

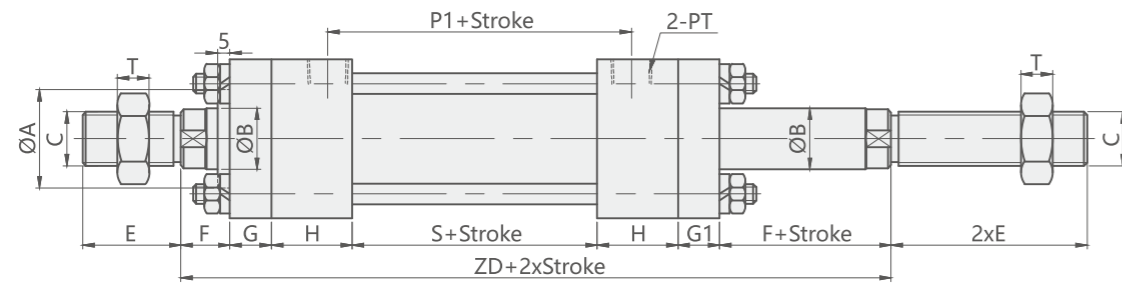
CHOB 基本型 CHOB BASIC TYPE



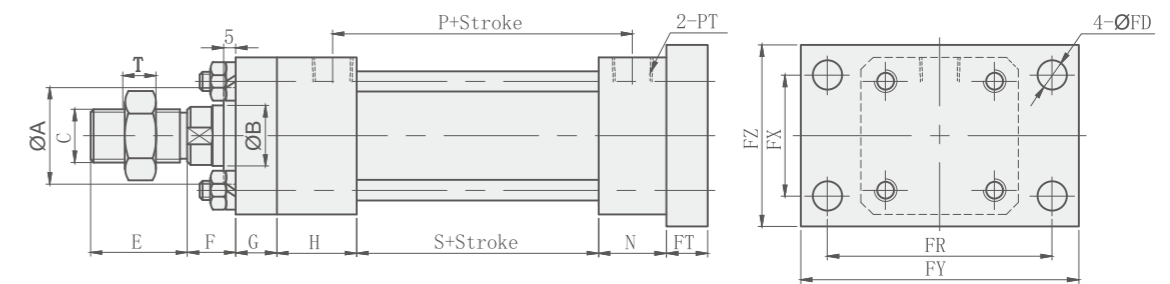
CHOB-FA 前法蘭型 CHOB-FA FRONT FLANGE TYPE



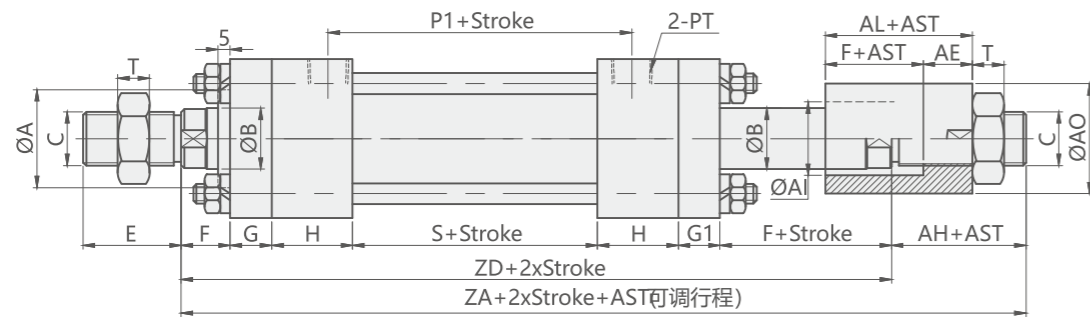
CHOD 雙軸型 CHOD DOUBLE END ROD TYPE



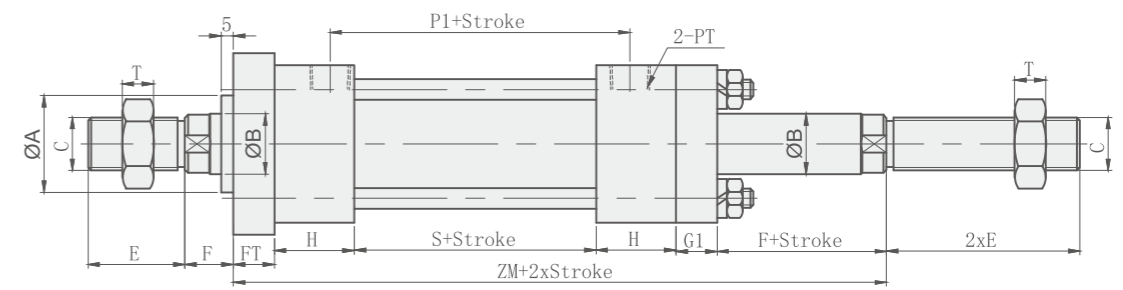
CHOB-FB 後法蘭型 CHOB-FB AFTER FLANGE TYPE



CHOD-A 雙軸型附可調帽 CHOD-A ADJUSTABLE DOUBLE END ROD TYPE



CHOD-FA 雙軸前法蘭型 CHOD-FA DOUBLE END FRONT FLANGE TYPE



Unit:mm

| CHOB-CHOD TYPE | | | | | | | | | | | | | | | | | | | A(可調行程)TYPE | | | | | | | | |
|----------------|-----|-----|----------|-----|-----|-----|----|----|----|----|-------|-----|------|---------|------|----|-----|----|-------------|-----|-----|-----|----|----|-----|-----|----|
| BORE | ΦA | ΦB | C | □D | □DE | E | F | G | H | N | P | P1 | PT | K | KE | G1 | S | T | W | Z | ZD | ZA | AH | AE | AI | AO | AL |
| Φ40 | 40 | 25 | M22xP1.5 | 65 | 45 | 40 | 20 | 17 | 33 | 28 | 76 | 74 | 3/8" | M10x1.5 | 20.5 | 22 | 50 | 10 | 32 | 148 | 195 | 230 | 35 | 20 | 30 | 45 | 40 |
| Φ50 | 50 | 30 | M26xP1.5 | 80 | 56 | 40 | 20 | 17 | 38 | 30 | 85 | 85 | 3/8" | M12x1.5 | 23 | 22 | 55 | 10 | 35 | 160 | 210 | 250 | 40 | 25 | 37 | 55 | 45 |
| Φ63 | 55 | 35 | M30xP1.5 | 90 | 63 | 45 | 20 | 17 | 38 | 30 | 85 | 85 | 3/8" | M14x1.5 | 24.5 | 22 | 55 | 13 | 41 | 160 | 210 | 250 | 40 | 25 | 42 | 60 | 45 |
| Φ80 | 60 | 40 | M30xP1.5 | 110 | 80 | 45 | 20 | 20 | 38 | 35 | 107 | 105 | 1/2" | M16x1.5 | 27 | 25 | 75 | 13 | 41 | 188 | 236 | 281 | 45 | 30 | 47 | 70 | 50 |
| Φ100 | 80 | 50 | M40xP2.0 | 131 | 95 | 55 | 25 | 20 | 41 | 37 | 123.5 | 120 | 1/2" | M18x1.5 | 29.5 | 25 | 90 | 15 | 55 | 213 | 267 | 312 | 45 | 30 | 57 | 90 | 55 |
| Φ125 | 90 | 60 | M50xP2.0 | 162 | 122 | 70 | 35 | 30 | 57 | 47 | 143 | 140 | 3/4" | M22x1.5 | 33.5 | 35 | 100 | 15 | 65 | 269 | 349 | 399 | 50 | 35 | 68 | 100 | 70 |
| Φ150 | 110 | 80 | M70xP2.0 | 195 | 144 | 80 | 35 | 30 | 60 | 50 | 135 | 130 | 3/4" | 1-8UNC | 46 | 35 | 90 | 20 | 90 | 265 | 345 | 405 | 60 | 40 | 90 | 120 | 75 |
| Φ180 | 135 | 100 | M90xP2.0 | 235 | 175 | 100 | 35 | 40 | 65 | 55 | 172 | 170 | 1" | M30x2.0 | 59 | 45 | 120 | 20 | 110 | 315 | 405 | 470 | 65 | 45 | 110 | 150 | 75 |
| Φ200 | 135 | 100 | M90xP2.0 | 262 | 193 | 100 | 40 | 40 | 65 | 60 | 175 | 170 | 1" | M33x2.0 | 59 | 45 | 120 | 20 | 110 | 325 | 415 | 480 | 65 | 40 | 110 | 150 | 80 |

注意事項

- 1.軸心加大如未註明長度尺寸時，依照本公司規定自行加工。
- 2.CHO系列行程未超過1500mm時，活塞長度 (PM) 如附表，訂製行程如超過1500mm時，活塞長度 (PM) 請參閱特性資料表。
- 3.本系列行程超過2000mm(含)時，須加拉杆中間固定座。
- 4.本系列行程軸心螺帽規格M50mm(含)以上時，其外徑為圓形。
- 5.AST為客戶指定之可調行程。

NOTE

1. For rods extending processing,if the length is not specified,then it should follow our company's stipulation for processing.
2. For the CHO series whose stroke is less than 1500mm,the length of the piston is shown in the affiliated table,for those customized stroke . Which is more than 1500mm,the length of piston conforms to characteristic table.
- 3.Middle rod holder must be installed for those CHO series whose stroke is equal to or more than 2000mm.
4. The external diameter would be round when the size of red nut is equal to or more than M50mm.
5. AST stands for adjustable stroke designated by customers.

Unit:mm

| CHOB-CHOD TYPE | | | | | | | | | | | | | | | | | | | FA-FB TYPE | | | | | |
|----------------|-----|-----|----------|-----|----|----|----|----|-------|-----|------|-----|----|-----|-----|-----|-----|----|------------|-----|-----|--|--|--|
| BORE | ΦA | ΦB | C | E | F | G | H | N | P | P1 | PT | S | G1 | ZF | ZM | ΦFD | FR | FT | FX | FY | FZ | | | |
| Φ40 | 40 | 25 | M22xP1.5 | 40 | 20 | 17 | 33 | 28 | 76 | 74 | 3/8" | 50 | 22 | 128 | 175 | 12 | 93 | 17 | 50 | 115 | 75 | | | |
| Φ50 | 50 | 30 | M26xP1.5 | 40 | 20 | 17 | 38 | 30 | 85 | 85 | 3/8" | 55 | 22 | 140 | 190 | 14 | 110 | 17 | 56 | 150 | 85 | | | |
| Φ63 | 55 | 35 | M30xP1.5 | 45 | 20 | 17 | 38 | 30 | 85 | 85 | 3/8" | 55 | 22 | 140 | 190 | 14 | 126 | 17 | 68 | 155 | 95 | | | |
| Φ80 | 60 | 40 | M30xP1.5 | 45 | 20 | 20 | 38 | 35 | 107 | 105 | 1/2" | 75 | 25 | 168 | 216 | 18 | 152 | 20 | 75 | 190 | 120 | | | |
| Φ100 | 80 | 50 | M40xP2.0 | 55 | 25 | 20 | 41 | 37 | 123.5 | 120 | 1/2" | 90 | 25 | 188 | 242 | 20 | 180 | 20 | 100 | 220 | 140 | | | |
| Φ125 | 90 | 60 | M50xP2.0 | 70 | 35 | 30 | 57 | 47 | 143 | 140 | 3/4" | 100 | 35 | 234 | 314 | 24 | 222 | 30 | 122 | 280 | 170 | | | |
| Φ150 | 110 | 80 | M70xP2.0 | 80 | 35 | 30 | 60 | 50 | 135 | 130 | 3/4" | 90 | 35 | 230 | 310 | 28 | 260 | 30 | 155 | 310 | 206 | | | |
| Φ180 | 135 | 100 | M90xP2.0 | 100 | 35 | 40 | 65 | 55 | 172 | 170 | 1" | 120 | 45 | 280 | 370 | 35 | 315 | 40 | 188 | 375 | 250 | | | |
| Φ200 | 135 | 100 | M90xP2.0 | 100 | 40 | 40 | 65 | 60 | 175 | 170 | 1" | 120 | 45 | 285 | 375 | 35 | 355 | 40 | 207 | 425 | 272 | | | |

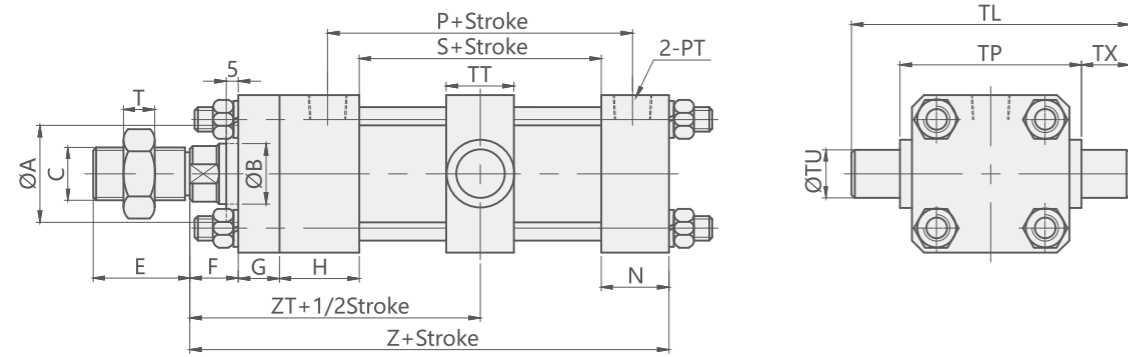
注意事項

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- 2.CHO系列行程未超過1500mm時，活塞長度 (PM) 如附表，訂製行程如超過1500mm時，活塞長度 (PM) 請參閱特性資料表。
- 3.本系列軸心螺帽規格M50mm (含以上時)，其外徑為圓形。

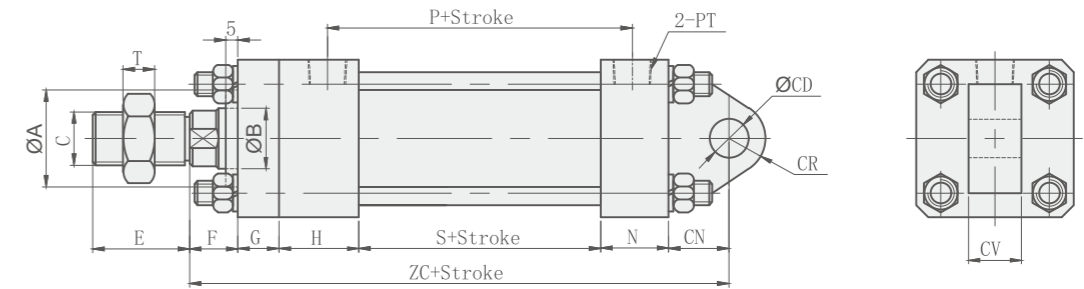
NOTE

1. For rods extending processing,if the length is not specified,then it should follow our company's stipulation for processing.
2. For the CHO series whose stroke is less than 1500mm,the length of piston is shown in the affiliated table,for those customized stroke . which is more than 1500mm,the length of piston conforms to characteristic table.
- 3.The external diameter would be shound when the size of rod nut is more than M50mm.

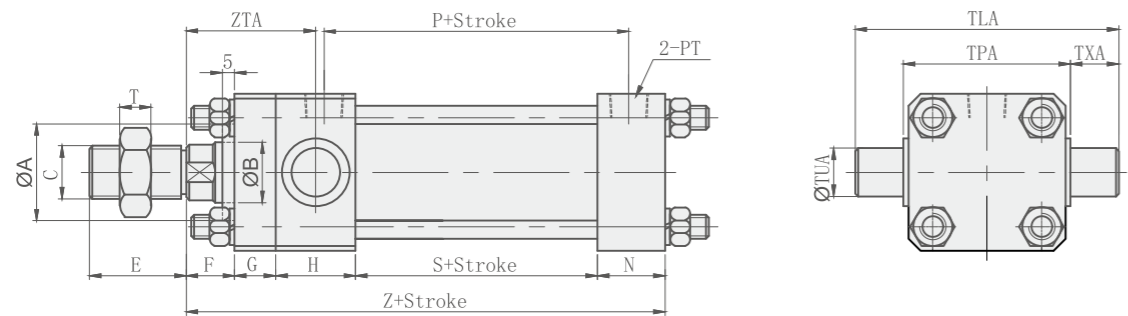
CHOB+TC中耳軸型 CHOB+TC MIDDLE TRUNNION TYPE



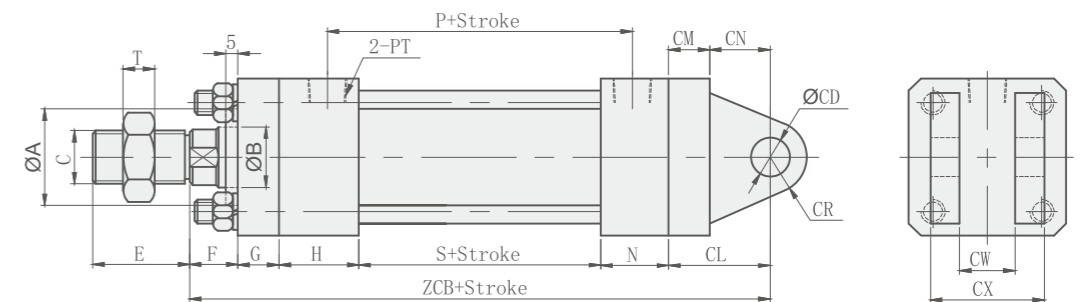
CHOB+CA 單耳環型 CHOB+CA SINGLE EARRINGS



CHOB+TA前耳軸型 CHOB+TA FRONT TRUNNION TYPE



CHOB+CB 雙耳環型 CHOB+CB DOUBLE EARRINGS



Unit:mm

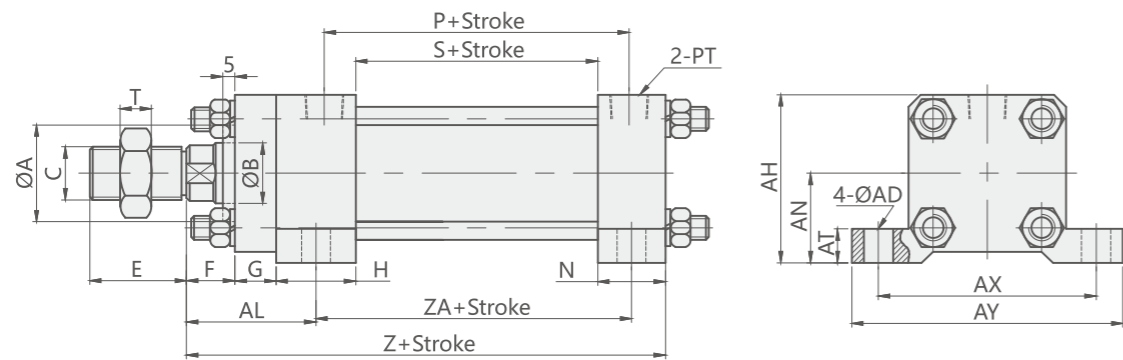
| CHOB TYPE | | | | | | | | | | | | | TC TYPE | | | | TA TYPE | | | | | | |
|------------|----------|----------|-----|----|----|----|----|-------|------|-----|----|-----|---------|-----------|-----|-----|---------|----|------------|-----|-----|-----|------|
| BORE | ΦB | C | E | F | G | H | N | P | PT | S | T | Z | ZT | ΦTU | TL | TP | TT | TX | ΦTUA | TLA | TPA | TXA | ZTA |
| $\Phi 40$ | 25 | M22xP1.5 | 40 | 20 | 17 | 33 | 28 | 76 | 3/8" | 50 | 10 | 148 | 95 | 20 | 115 | 75 | 28 | 20 | 20 | 109 | 69 | 20 | 53.5 |
| $\Phi 50$ | 30 | M26xP1.5 | 40 | 20 | 17 | 38 | 30 | 85 | 3/8" | 55 | 10 | 160 | 102.5 | 25 | 140 | 90 | 33 | 25 | 25 | 134 | 84 | 25 | 56 |
| $\Phi 63$ | 35 | M30xP1.5 | 45 | 20 | 17 | 38 | 30 | 85 | 3/8" | 55 | 13 | 160 | 102.5 | 32 | 166 | 102 | 40 | 32 | 30 | 154 | 94 | 30 | 56 |
| $\Phi 80$ | 40 | M30xP1.5 | 45 | 20 | 20 | 38 | 35 | 107 | 1/2" | 75 | 13 | 188 | 115.5 | 32 | 184 | 120 | 43 | 32 | 30 | 174 | 114 | 30 | 59 |
| $\Phi 100$ | 50 | M40xP2.0 | 55 | 25 | 20 | 41 | 37 | 123.5 | 1/2" | 90 | 15 | 213 | 131 | 40 | 220 | 140 | 53 | 40 | 35 | 205 | 135 | 35 | 65.5 |
| $\Phi 125$ | 60 | M50xP2.0 | 70 | 35 | 30 | 57 | 47 | 143 | 3/4" | 100 | 15 | 269 | 172 | 50 | 275 | 175 | 58 | 50 | 45 | 258 | 168 | 45 | 93.5 |
| $\Phi 150$ | 80 | M70xP2.0 | 80 | 35 | 30 | 60 | 50 | 135 | 3/4" | 90 | 20 | 265 | 170 | 60 | 326 | 206 | 73 | 60 | 50 | 300 | 200 | 50 | 95 |
| $\Phi 180$ | 100 | M90xP2.0 | 100 | 35 | 40 | 65 | 55 | 172 | 1" | 120 | 20 | 315 | 200 | 80 | 403 | 243 | 98 | 80 | | | | | |
| $\Phi 200$ | 100 | M90xP2.0 | 100 | 40 | 40 | 65 | 60 | 175 | 1" | 120 | 20 | 325 | 205 | 90 | 452 | 272 | 108 | 90 | | | | | |

備註：標準CHOB+TA型缸徑為 $\Phi 40$ - $\Phi 50$ 。 Note: The standard bore size for CHOB+TA type is $\Phi 40$ - $\Phi 50$.

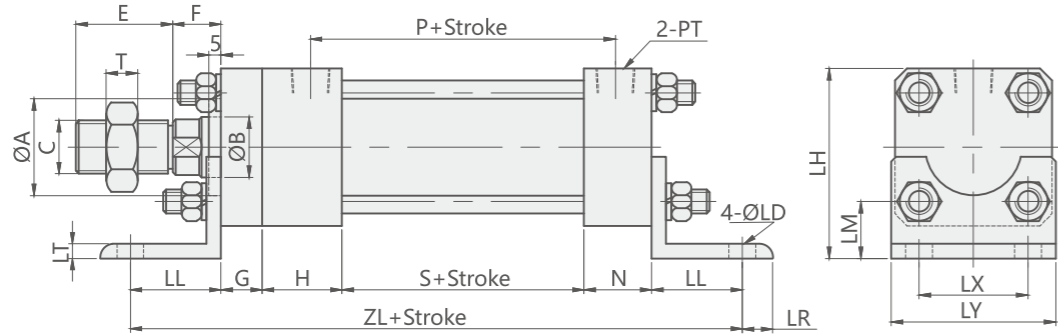
Unit:mm

| CHOB TYPE | | | | | | | | | | | | | CA+CB TYPE | | | | | | | | |
|------------|----------|----------|-----|----|----|----|----|-------|------|-----|----|-----|------------|-----------|-----|----|-----|----|----|----|-----|
| BORE | ΦB | C | E | F | G | H | N | P | PT | S | T | ZC | ZCB | ΦCD | CL | CM | CN | CR | CV | CW | CX |
| $\Phi 40$ | 25 | M22xP1.5 | 40 | 20 | 17 | 33 | 28 | 76 | 3/8" | 50 | 10 | 173 | 190 | 16 | 42 | 17 | 25 | 15 | 22 | 23 | 47 |
| $\Phi 50$ | 30 | M26xP1.5 | 40 | 20 | 17 | 38 | 30 | 85 | 3/8" | 55 | 10 | 195 | 212 | 20 | 52 | 17 | 35 | 20 | 22 | 23 | 47 |
| $\Phi 63$ | 35 | M30xP1.5 | 45 | 20 | 17 | 38 | 30 | 85 | 3/8" | 55 | 13 | 205 | 222 | 25 | 62 | 17 | 45 | 25 | 30 | 31 | 59 |
| $\Phi 80$ | 40 | M30xP1.5 | 45 | 20 | 20 | 38 | 35 | 107 | 1/2" | 75 | 13 | 238 | 258 | 30 | 70 | 20 | 50 | 30 | 35 | 36 | 76 |
| $\Phi 100$ | 50 | M40xP2.0 | 55 | 25 | 20 | 41 | 37 | 123.5 | 1/2" | 90 | 15 | 273 | 293 | 35 | 80 | 20 | 60 | 35 | 40 | 41 | 81 |
| $\Phi 125$ | 60 | M50xP2.0 | 70 | 35 | 30 | 57 | 47 | 143 | 3/4" | 100 | 15 | 339 | 369 | 50 | 100 | 30 | 70 | 50 | 55 | 56 | 106 |
| $\Phi 150$ | 80 | M70xP2.0 | 80 | 35 | 30 | 60 | 50 | 135 | 3/4" | 90 | 20 | 345 | 375 | 60 | 110 | 30 | 80 | 60 | 60 | 61 | 121 |
| $\Phi 180$ | 100 | M90xP2.0 | 100 | 35 | 40 | 65 | 55 | 172 | 1" | 120 | 20 | 415 | 455 | 80 | 140 | 40 | 100 | 80 | 80 | 81 | 161 |
| $\Phi 200$ | 100 | M90xP2.0 | 100 | 40 | 40 | 65 | 60 | 175 | 1" | 120 | 20 | 435 | 475 | 90 | 150 | 40 | 110 | 90 | 90 | 91 | 171 |

CHOB+LA 左右腳座型 CHOB+LA FEET SEAT TYPE



CHOB+LB 前後腳座型 CHOB+LB COURSE OF A TYPE



Unit:mm

| BORE $\varnothing B$ | CHOB TYPE | | | | | | | | | | LA TYPE | | | | | | | | | | LB TYPE | | | | | | | | | |
|----------------------|-----------|----------|-----|----|----|----|----|-------|-----|-----|---------|-------|-----|-----|-------|------------------|----|----|-----|-----|------------------|----|------|------|------|----|-----|-----|-------|--|
| | C | E | F | G | H | N | P | PT | S | T | ZA | Z | AN | AH | AL | $\varnothing AD$ | AT | AX | AY | ZL | $\varnothing LD$ | LL | LM | LR | LT | LX | LY | LH | | |
| $\varnothing 40$ | 25 | M22xP1.5 | 40 | 20 | 17 | 33 | 28 | 76 | 3/8 | 50 | 10 | 80.5 | 148 | 37 | 69.5 | 53.5 | 12 | 14 | 90 | 112 | 203 | 11 | 37.5 | 23.5 | 12.5 | 6 | 45 | 68 | 78.5 | |
| $\varnothing 50$ | 30 | M26xP1.5 | 40 | 20 | 17 | 38 | 30 | 85 | 3/8 | 55 | 10 | 89 | 160 | 45 | 85 | 56 | 14 | 17 | 115 | 140 | 224 | 14 | 42 | 26 | 22 | 8 | 56 | 85 | 94 | |
| $\varnothing 63$ | 35 | M30xP1.5 | 45 | 20 | 17 | 38 | 30 | 85 | 3/8 | 55 | 13 | 89 | 160 | 50 | 95 | 56 | 14 | 19 | 128 | 156 | 228 | 16 | 44 | 26 | 22 | 8 | 62 | 95 | 102 | |
| $\varnothing 80$ | 40 | M30xP1.5 | 45 | 20 | 20 | 38 | 35 | 107 | 1/2 | 75 | 13 | 111.5 | 188 | 60 | 115 | 59 | 18 | 25 | 152 | 184 | 294 | 18 | 63 | 36 | 27 | 13 | 80 | 120 | 131 | |
| $\varnothing 100$ | 50 | M40xP2.0 | 55 | 25 | 20 | 41 | 37 | 123.5 | 1/2 | 90 | 15 | 129 | 213 | 70 | 135.5 | 65.5 | 21 | 27 | 178 | 210 | 320 | 20 | 66 | 45.5 | 24 | 15 | 100 | 140 | 158.5 | |
| $\varnothing 125$ | 60 | M50xP2.0 | 70 | 35 | 30 | 57 | 47 | 143 | 3/4 | 100 | 15 | 152 | 269 | 90 | 171 | 93.5 | 24 | 30 | 230 | 280 | 394 | 24 | 80 | 53 | 30 | 15 | 122 | 169 | 195 | |
| $\varnothing 150$ | 80 | M70xP2.0 | 80 | 35 | 30 | 60 | 50 | 135 | 3/4 | 90 | 20 | 145 | 265 | 113 | 208 | 95 | 28 | 35 | 270 | 325 | 390 | 28 | 80 | 53 | 30 | 20 | 144 | 200 | 220 | |
| $\varnothing 180$ | 100 | M90xP2.0 | 100 | 35 | 40 | 65 | 55 | 172 | 1 | 120 | 20 | 180 | 315 | 143 | 260.5 | 107 | 35 | 45 | 330 | 395 | 460 | 35 | 90 | 62.5 | 40 | 20 | 175 | 240 | 267.5 | |
| $\varnothing 200$ | 100 | M90xP2.0 | 100 | 40 | 40 | 65 | 60 | 175 | 1 | 120 | 20 | 182.5 | 325 | 161 | 292 | 112 | 35 | 50 | 360 | 430 | 475 | 35 | 95 | 73.5 | 40 | 25 | 193 | 265 | 301 | |

