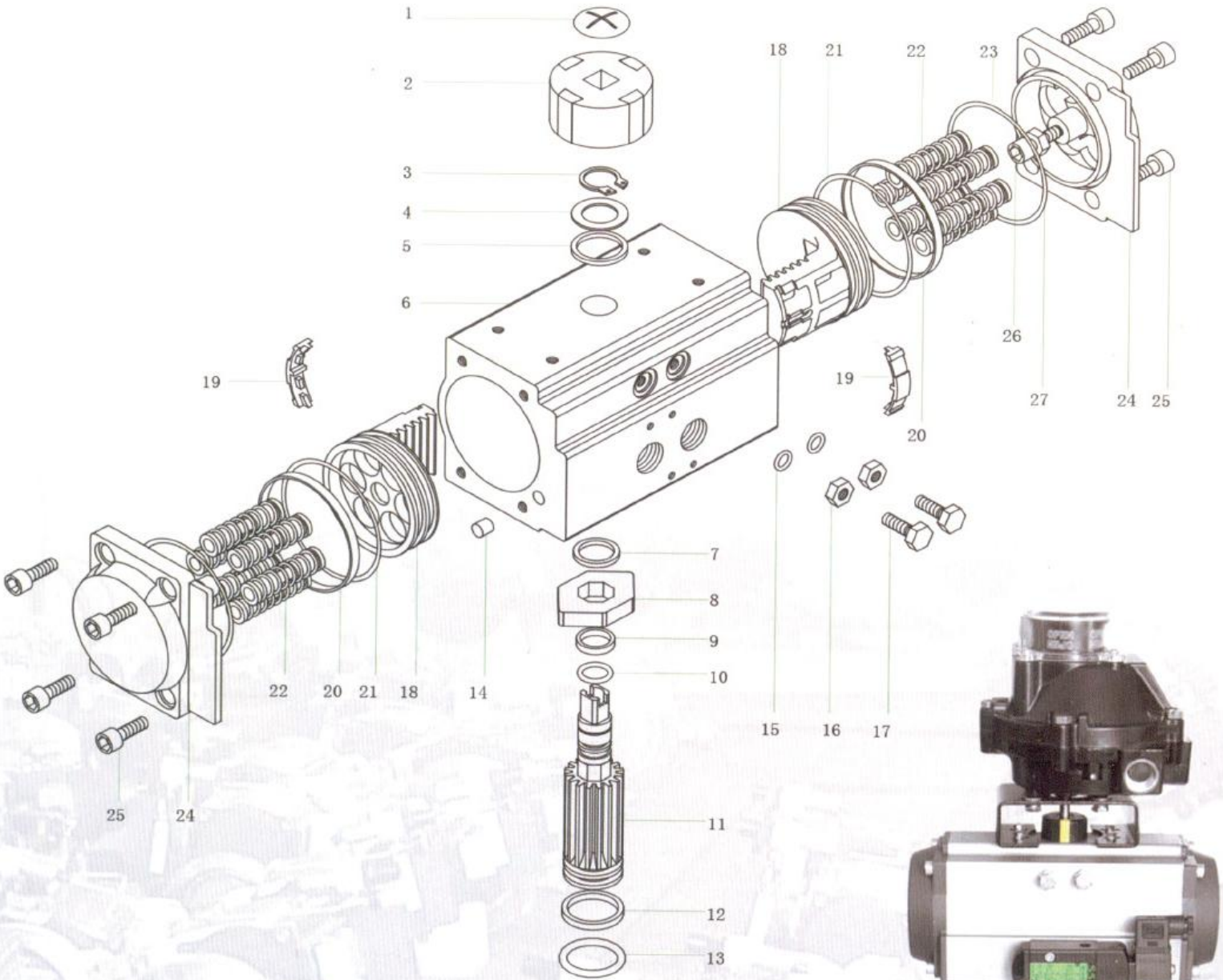
# CHIA HUNG PLASTICS CO., LTD

Professional manufacture and sale for plastic valves and pipe fittings

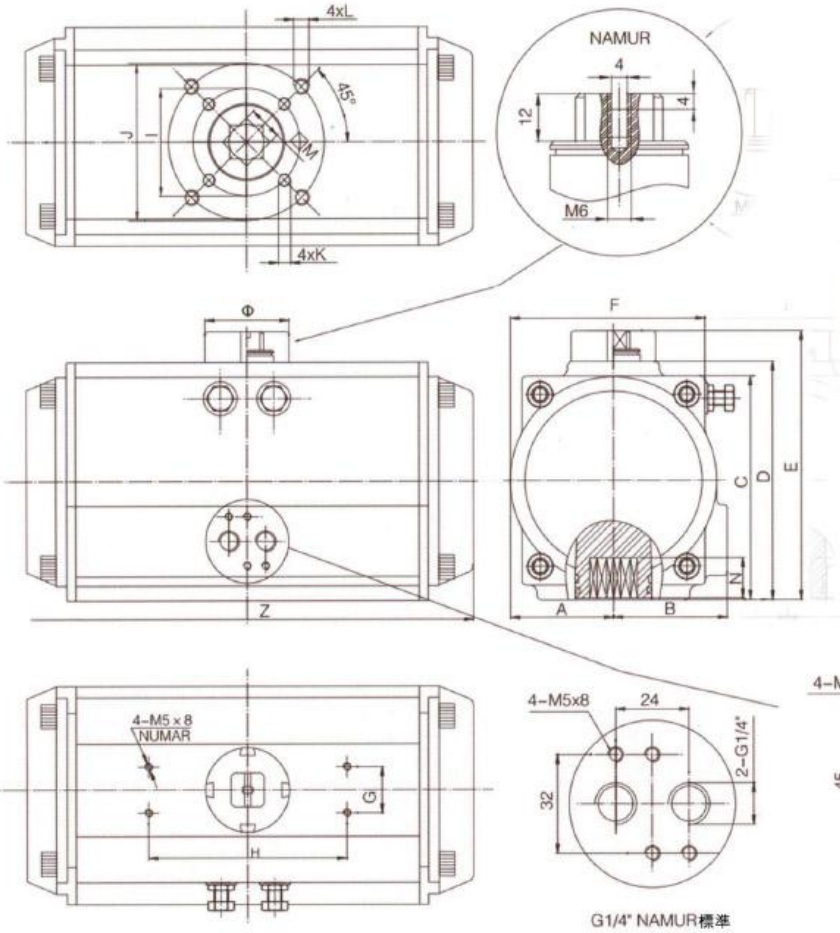
# 零件和材料 Parts and Material

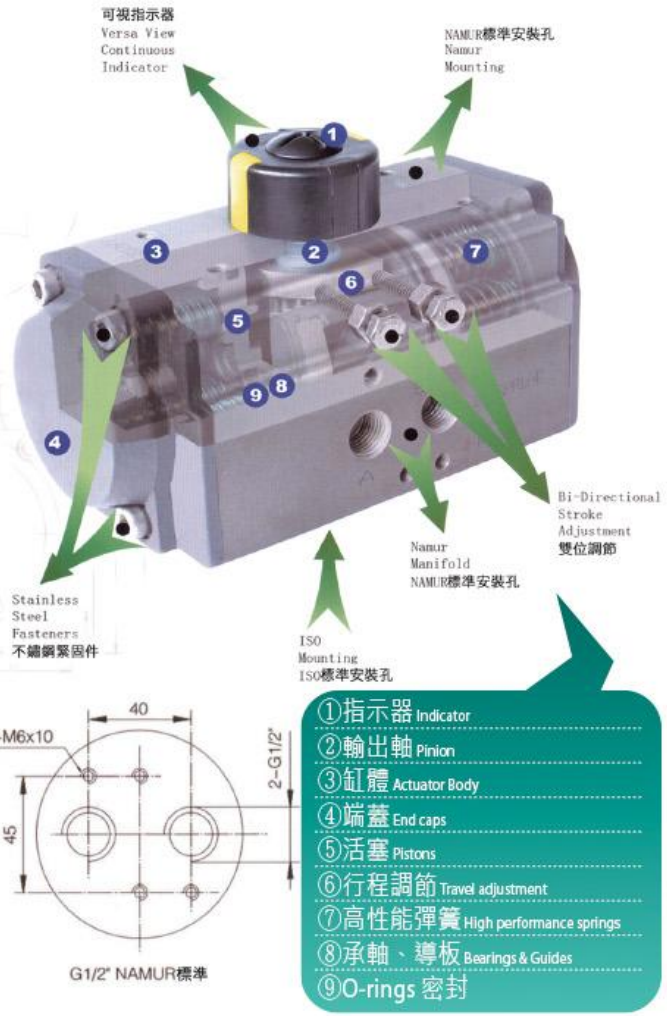



| 序號 | 名稱 | 數量 | 材料 | 防腐處理 | 可選材料 |
|---|---|---|---|---|---|
| 1 | 指示器螺釘 | 1 | 塑料 | | |
| 2 | 指示器 | 1 | 塑料 | | |
| 3 | 卡簧 | 1 | 不鏽鋼 | | |
| 4 | 墊圈 | 1 | 不鏽鋼 | | |
| 5 | 外墊片 | 1 | 工程塑料 | | |
| 6 | 缸體 | 1 | 鑄鋁 | 硬質氧化等 | |
| 7 | 內墊片 | 1 | 工程塑料 | | |
| 8 | 凸輪 | 1 | 合金鋼 | | |
| 9 | 上軸軸承 | 1 | 工程塑料 | | |
| 10 | 上軸O環 | 1 | 丁腈橡膠 | | 氟橡膠/矽橡膠 |
| 11 | 齒軸 | 1 | 合金鋼 | 鍍鎳 | 不鏽鋼 |
| 12 | 下軸軸承 | 1 | 工程塑料 | | |
| 13 | 下軸O環 | 1 | 丁腈橡膠 | | 氟橡膠/矽橡膠 |
| 14 | 堵頭 | 2 | 丁腈橡膠 | | 氟橡膠/矽橡膠 |
| 15 | 調節螺釘O圈 | 2 | 丁腈橡膠 | | 氟橡膠/矽橡膠 |
| 16 | 調節螺釘螺母 | 2 | 不鏽鋼 | | |
| 17 | 調節螺栓 | 2 | 不鏽鋼 | | |
| 18 | 活塞 | 2 | 鑄鋁/鑄鋼 | 氧化/鍍鋅 | 不鏽鋼 |
| 19 | 活塞導板 | 2 | 工程塑料 | | |
| 20 | 活塞軸承 | 2 | 工程塑料 | | |
| 21 | 活塞O圈 | 2 | 丁腈橡膠 | | 氟橡膠/矽橡膠 |
| 22 | 彈簧 | 0~12 | 彈簧鋼 | 浸漆 | |
| 23 | 端蓋O圈 | 2 | 丁腈橡膠 | | 氟橡膠/矽橡膠 |
| 24 | 端蓋 | 2 | 鑄鋁 | 粉末噴塗等 | |
| 25 | 端蓋螺栓 | 8 | 不鏽鋼 | | |
| 26 | 限位螺栓 | 2 | 不鏽鋼 | | |
| 27 | 限位螺母 | 2 | 不鏽鋼 | | |

| No. | Description | Qty | STANDARD METERIAL | PROTECTION | OPTIONAL METERIAL |
|---|---|---|---|---|---|
| 1 | Indicator screw | 1 | plastic | | |
| 2 | Indicator | 1 | plastic | | |
| 3 | Spring clip | 1 | Stainless Steel | | |
| 4 | Thrust washer | 1 | Stainless Steel | | |
| 5 | Outside washer | 1 | engineering plastics | | |
| 6 | Body | 1 | Extruded alluminum alloy | Hard anodized etc | |
| 7 | Inside washer | 1 | engineering plastics | | |
| 8 | Cam | 1 | Alloy steel | | |
| 9 | O-ring (pinion top) | 1 | NBR | | Viton/Silicone |
| 10 | Bearing(pinion top) | 1 | engineering plastics | | |
| 11 | Pinion | 1 | Alloy steel | Nickel plated | Stainless Steel |
| 12 | O-ring pinion bottom) | 1 | engineering plastics | | |
| 13 | Bearing(pinion bottom) | 1 | NBR | | Viton/Silicone |
| 14 | Plug | 2 | NBR | | Viton/Silicone |
| 15 | O-ring(Adjust screw) | 2 | NBR | | Viton/Silicone |
| 16 | Nut(Adjust screw) | 2 | Stainless Steel | | |
| 17 | Adjust screw | 2 | Stainless Steel | | |
| 18 | Piston | 2 | Cast alluminum/casting | anodized/Zinc galvanized | Stainless Steel |
| 19 | Guide(Piston) | 2 | engineering plastics | | |
| 20 | Bearing(Piston) | 2 | engineering plastics | | |
| 21 | O-ring(Piston) | 2 | NBR | | Viton/Silicone |
| 22 | Spring | 0~12 | Spring steel | dip coating | |
| 23 | O-ring(End cap) | 2 | NBR | | Viton/Silicone |
| 24 | End cap | 2 | Cast alluminum | powder polyster painted etc | |
| 25 | Cap screw | 8 | Stainless Steel | | |
| 26 | Stop screw | 2 | Stainless Steel | | |
| 27 | Nut(stop screw) | 2 | Stainless Steel | | |

# 外型尺寸 Dimension

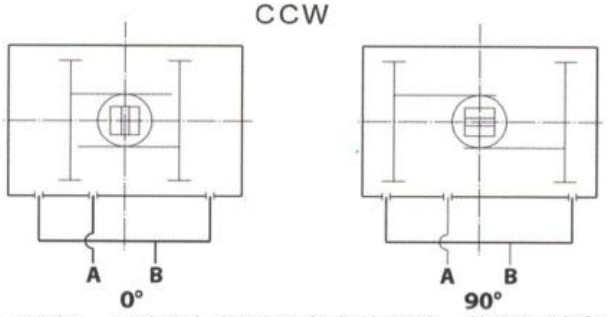



| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | Z | Φ | 氣源接口 Air connection |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CH032 | 24 | 24 | 46 | 45 | 65 | 47 | 30 | 50 | Φ21 | Φ50 | M5X8 | M5X10 | 9 | 12 | 123 | Φ40 | NAMUR G1/8 " |
| CH040 | 24 | 34 | 60 | 63 | 83 | 49 | 30 | 50 | Φ36 | Φ50 | M5X8 | M6X10 | 11 | 15 | 123 | Φ40 | NAMUR G1/8 " |
| CH052 | 30 | 41.5 | 65.5 | 72 | 92 | 65 | 30 | 80 | Φ36 | Φ50 | M5X8 | M6X10 | 11 | 14 | 147 | Φ40 | NAMUR G1/4 " |
| CH063 | 36 | 47 | 81 | 87.5 | 107.5 | 72 | 30 | 80 | Φ50 | Φ70 | M6X10 | M8X13 | 14 | 18 | 168 | Φ40 | NAMUR G1/4 " |
| CH075 | 42 | 53 | 94 | 99.5 | 119.5 | 81 | 30 | 80 | Φ50 | Φ70 | M6X10 | M8X13 | 14 | 18 | 184 | Φ40 | NAMUR G1/4 " |
| CH083 | 46 | 57 | 98.5 | 108.7 | 128.7 | 92 | 30 | 80 | Φ50 | Φ70 | M6X10 | M8X13 | 17 | 21 | 204 | Φ40 | NAMUR G1/4 " |
| CH092 | 50 | 58.5 | 111 | 116.5 | 136.5 | 98 | 30 | 80 | Φ50 | Φ70 | M6X10 | M8X13 | 17 | 21 | 262 | Φ40 | NAMUR G1/4 " |
| CH105 | 57.5 | 64 | 122.5 | 133 | 153 | 109.5 | 30 | 80 | Φ 70 | Φ 102 | M8X13 | M10X16 | 22 | 26 | 268 | Φ40 | NAMUR G1/4 " |
| CH125 | 67.5 | 74.5 | 145.5 | 155 | 175 | 127.5 | 30 | 80 | Φ70 | Φ 102 | M8X13 | M10X16 | 22 | 26 | 301 | Φ55 | NAMUR G1/4 " |
| CH140 | 75 | 77 | 161 | 172 | 192 | 137.5 | 30 | 80 | Φ 102 | Φ 125 | M10X16 | M12X20 | 27 | 31 | 390 | Φ55 | NAMUR G1/4 " |
| CH160 | 87 | 87 | 184 | 197 | 217 | 158 | 30 | 80 | Φ 102 | Φ 125 | M10X16 | M12X20 | 27 | 31 | 458 | Φ55 | NAMUR G1/4 " |
| CH190 | 104 | 103 | 213 | 230 | 260 | 189 | 30 | 130 | | Φ 140 | | M16X25 | 36 | 40 | 525 | Φ80 | NAMUR G1/4 " |
| CH210 | 113 | 133 | 235.5 | 255 | 285 | 210 | 30 | 130 | | Φ140 | | M16X25 | 36 | 40 | 532 | Φ 80 | NAMUR G1/4 " |
| CH240 | 130 | 130 | 264.5 | 289 | 319 | 245 | 30 | 180 | | Φ165 | | M20X25 | 46 | 50 | 602 | Φ80 | NAMUR G1/4 " |
| CH270 | 147 | 147 | 299 | 326 | 356 | 273 | 30 | 130 | | Φ165 | | M20X25 | 46 | 50 | 722 | Φ 80 | NAMUR G1/2 " |

# 雙動汽缸 Double Acting Actuators

CCW



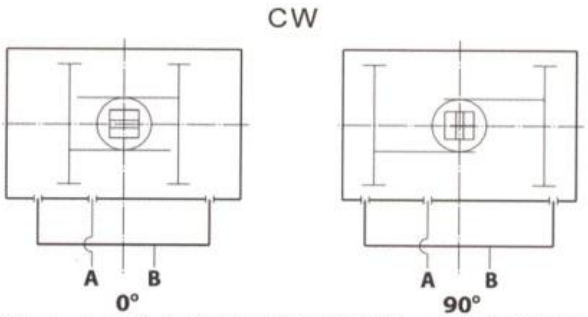

A口進氣，壓縮空氣推動活塞向外運動，使汽缸輸出軸逆時針旋轉(0°→90°)，B口排氣。

B口進氣，壓縮空氣推動活塞向內運動，使汽缸輸出軸順時針旋轉(90°→0°)，A口排氣。

**Air to Port A forces the pistons outwards, causing the pinion to turn counterclockwise while the air is being exhausted from Port B.**

**Air to Port B forces the pistons inwards, causing the pinion to turn clockwise while the air is being exhausted from Port A.**

CW




A口進氣，壓縮空氣推動活塞向外運動，使汽缸輸出軸順時針旋轉(0°→90°)，B口排氣。

B口進氣，壓縮空氣推動活塞向內運動，使汽缸輸出軸逆時針旋轉(90°→0°)，A口排氣。

**Air to Port A forces the pistons outwards, causing the pinion to turn clockwise while the air is being exhausted from Port B.**

**Air to Port B forces the pistons inwards, causing the pinion to turn counterclockwise while the air is being exhausted from Port A.**

雙動汽缸輸出力矩 **Output Torque of Double Acting Actuators** **(Unit: Nm)**

| Model 型号 | Air supply pressure (Unit: Bar)輸入氣源壓力(單位：巴) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | 2.5 | 3 | 4 | 4.5 | 5 | 5.5 | 6 | 7 | 8 |
| CH052DA | 8.0 | 10.0 | 12.0 | 16.0 | 18.0 | 20.0 | 21.9 | 23.9 | 27.9 | 31.9 |
| CH063DA | 14.6 | 18.2 | 21.9 | 29.2 | 32.8 | 36.5 | 40.1 | 43.8 | 51.1 | 58.4 |
| CH075DA | 20.1 | 25.1 | 30.1 | 40.1 | 45.1 | 50.2 | 55.2 | 60.2 | 70.2 | 80.3 |
| CH083DA | 31.4 | 39.2 | 47.0 | 62.7 | 70.5 | 78.4 | 86.2 | 94.1 | 109.7 | 125.4 |
| CH092DA | 45.1 | 56.4 | 67.7 | 90.3 | 101.6 | 112.9 | 124.1 | 135.4 | 158.0 | 180.6 |
| CH105DA | 66.1 | 82.7 | 99.2 | 132.2 | 148.8 | 165.3 | 181.8 | 198.4 | 231.4 | 264.5 |
| CH125DA | 100.3 | 125.4 | 150.5 | 200.6 | 225.7 | 250.8 | 275.9 | 301.0 | 351.1 | 401.3 |
| CH140DA | 171.0 | 213.8 | 256.5 | 342.0 | 384.8 | 427.5 | 470.3 | 513.0 | 598.5 | 684.0 |
| CH160DA | 266.0 | 332.5 | 399.0 | 532.0 | 598.5 | 665.0 | 731.5 | 798.0 | 931.0 | 1064.0 |
| CH190DA | 425.6 | 532.0 | 638.4 | 851.2 | 957.6 | 1064.0 | 1170.4 | 1276.8 | 1489.6 | 1702.4 |
| CH210DA | 532.0 | 665.0 | 798.0 | 1064.0 | 1197.0 | 1330.0 | 1463.0 | 1596.0 | 1862.0 | 2128.0 |
| CH240DA | 769.5 | 961.9 | 1154.3 | 1539.0 | 1731.4 | 1923.8 | 2116.1 | 2308.5 | 2693.3 | 3078.0 |
| CH270DA | 1169.6 | 1462.1 | 1754.5 | 2339.3 | 2631.7 | 2924.1 | 3216.5 | 3508.9 | 4093.7 | 4678.6 |

雙動汽缸的選型:

在正常操作條件下，雙動汽缸考慮的安全係數為20%-30%。

示例：

- 閥門力矩=100Nm
- 安全力矩=100×(1+30%)=130Nm
- 氣源壓力=5Bar

對照雙動用力矩表，選配雙動汽缸最小規格為RT160DA。

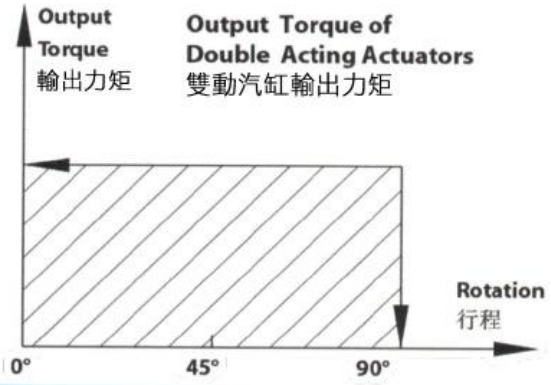
**Sizing: Double Acting Actuator**

**The suggested safety factor for double acting actuators under normal working conditions is 20%-30%.**

**Example:**

- **The torque needed by valve=100N.m**
- **The torque considered safety factor (1+30%)=130N.m**
- **Air Supply=5Bar**

**According to the above table, we can choose the minimum model is RT160DA.**



(Unit: Nm)

## 單動汽缸輸出力矩 Output Torque of Spring Return Actuators

### 氣源克服彈簧輸出力矩 Output torque of air to springs

| Model 型號 | Air pressure 氣源壓力 | 2.5Bar | | 3Bar | | 4Bar | | 5Bar | | 6Bar | | 7Bar | | 8Bar | | Springs' output 彈簧輸出力矩 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Spring Q.ty 彈簧數量 | 0° Start 開始 | 90° End 結束 | 0° Start 開始 | 90° End 結束 | 0° Start 開始 | 90° End 結束 | 0° Start 開始 | 90° End 結束 | 0° Start 開始 | 90° End 結束 | 0° Start 開始 | 90° End 結束 | 0° Start 開始 | 90° End 結束 | 90° Start 開始 | 0° End 結束 |
| CH052SR | 5 | 5.7 | 3.8 | 7.6 | 5.7 | | | | | | | | | | | 6.2 | 4.3 |
| | 6 | 4.9 | 2.5 | 6.9 | 4.5 | 10.9 | 8.5 | | | | | | | | | 7.4 | 5.0 |
| | 7 | 4.0 | 1.3 | 6.0 | 3.3 | 9.8 | 7.3 | 14.0 | 10.4 | | | | | | | 8.6 | 5.9 |
| | 8 | | | 5.2 | 2.0 | 9.2 | 6.0 | 13.2 | 9.1 | 17.2 | 14.1 | | | | | 9.9 | 6.7 |
| | 9 | | | 4.3 | 0.8 | 8.3 | 4.8 | 12.3 | 7.9 | 16.3 | 12.8 | 20.3 | 16.8 | | | 11.1 | 7.6 |
| | 10 | | | | | 7.4 | 3.6 | 11.5 | 6.7 | 15.5 | 11.6 | 19.5 | 15.6 | | | 12.4 | 8.5 |
| | 11 | | | | | 6.6 | 2.3 | 10.6 | 5.4 | 14.6 | 10.4 | 18.6 | 14.3 | 22.6 | 18.3 | 13.6 | 9.3 |
| | 12 | | | | | | | 9.7 | 4.2 | 13.8 | 9.1 | 17.8 | 12.2 | 21.8 | 17.1 | 14.8 | 10.2 |
| CH063SR | 5 | 11.4 | 7.7 | 15.0 | 11.4 | 22.3 | 14.9 | | | | | | | | | 10.4 | 6.8 |
| | 6 | 10.1 | 5.7 | 13.6 | 9.3 | 20.9 | 16.6 | 28.3 | 23.9 | | | | | | | 12.5 | 8.2 |
| | 7 | 8.6 | 3.6 | 12.5 | 7.2 | 19.5 | 14.5 | 26.8 | 21.9 | | | | | | | 14.6 | 9.6 |
| | 8 | | | 10.9 | 5.1 | 18.2 | 12.4 | 25.5 | 19.8 | 32.8 | 27.0 | 40.1 | 34.3 | | | 16.7 | 10.9 |
| | 9 | | | | | 16.8 | 10.4 | 24.1 | 17.7 | 31.4 | 24.9 | 38.7 | 32.2 | | | 18.8 | 12.3 |
| | 10 | | | | | 1.4 | 8.2 | 22.8 | 15.6 | 30.0 | 22.8 | 37.3 | 30.1 | 44.7 | 37.4 | 20.9 | 13.7 |
| | 11 | | | | | | | 21.5 | 13.5 | 28.7 | 20.7 | 36.0 | 28.0 | 43.3 | 35.3 | 22.9 | 15.0 |
| | 12 | | | | | | | 20.0 | 11.4 | 27.3 | 18.6 | 34.6 | 25.9 | 41.9 | 33.3 | 25.0 | 16.4 |
| CH075SR | 5 | 14.5 | 10.6 | 19.4 | 15.5 | 29.5 | 25.7 | | | | | | | | | 14.5 | 10.5 |
| | 6 | 12.4 | 7.6 | 17.3 | 12.6 | 27.4 | 22.7 | 37.5 | 32.8 | | | | | | | 17.4 | 12.7 |
| | 7 | 10.4 | 4.8 | 15.2 | 9.7 | 25.3 | 19.9 | 35.4 | 29.9 | | | | | | | 20.3 | 14.8 |
| | 8 | | | 13.1 | 6.8 | 23.1 | 16.9 | 33.3 | 27.0 | 43.2 | 37.0 | 53.3 | 47.0 | | | 23.2 | 16.9 |
| | 9 | | | | | 21.0 | 14.1 | 31.2 | 24.1 | 41.1 | 34.1 | 51.2 | 44.2 | | | 26.1 | 19.0 |
| | 10 | | | | | 19.0 | 11.1 | 28.8 | 21.2 | 39.0 | 31.2 | 49.1 | 41.2 | 59.1 | 51.2 | 29.0 | 21.1 |
| | 11 | | | | | | | 27.0 | 18.3 | 37.0 | 28.3 | 47.0 | 38.4 | 57.0 | 48.4 | 31.9 | 23.2 |
| | 12 | | | | | | | 24.9 | 15.4 | 34.9 | 25.4 | 44.9 | 35.4 | 54.9 | 45.4 | 34.7 | 25.3 |
| CH083SR | 5 | 23.3 | 16.1 | 31.1 | 24.0 | 46.8 | 39.7 | | | | | | | | | 23.0 | 15.8 |
| | 6 | 20.1 | 11.5 | 28.0 | 19.3 | 43.7 | 35.1 | 59.4 | 50.7 | | | | | | | 27.6 | 19.0 |
| | 7 | 17.0 | 6.9 | 24.8 | 14.8 | 40.5 | 30.5 | 56.2 | 46.2 | | | | | | | 32.2 | 22.1 |
| | 8 | | | 21.7 | 10.1 | 37.4 | 25.8 | 53.1 | 41.5 | 68.8 | 57.2 | 84.5 | 72.9 | | | 36.8 | 25.3 |
| | 9 | | | | | 34.2 | 21.3 | 49.9 | 37.0 | 65.6 | 52.6 | 81.2 | 68.3 | | | 41.4 | 28.5 |
| | 10 | | | | | 31.0 | 16.6 | 46.7 | 32.3 | 62.4 | 48.0 | 78.1 | 63.7 | 93.8 | 79.3 | 46.0 | 31.6 |
| | 11 | | | | | | | 43.6 | 27.7 | 59.3 | 43.4 | 75.0 | 59.1 | 90.6 | 74.8 | 50.6 | 34.8 |
| | 12 | | | | | | | 40.4 | 23.2 | 56.1 | 38.9 | 71.7 | 54.5 | 87.4 | 70.2 | 55.2 | 38.0 |
| CH092SR | 5 | 33.1 | 22.0 | 44.2 | 33.2 | 66.8 | 55.9 | | | | | | | | | 34.4 | 23.3 |
| | 6 | 28.4 | 15.2 | 39.6 | 26.4 | 62.2 | 49.0 | 84.8 | 71.6 | | | | | | | 41.2 | 28.0 |
| | 7 | 23.8 | 8.2 | 34.9 | 19.4 | 57.5 | 42.1 | 80.2 | 64.7 | | | | | | | 48.1 | 32.7 |
| | 8 | | | 31.3 | 12.6 | 52.9 | 35.2 | 75.5 | 57.9 | 98.1 | 80.5 | 120.7 | 103.0 | | | 55.0 | 37.3 |
| | 9 | | | | | 48.2 | 28.4 | 70.9 | 51.0 | 93.5 | 73.6 | 116.0 | 96.1 | | | 61.9 | 42.0 |
| | 10 | | | | | 43.6 | 21.5 | 66.2 | 44.1 | 88.8 | 66.7 | 111.3 | 89.2 | 134.0 | 111.8 | 68.7 | 46.7 |
| | 11 | | | | | | | 61.5 | 37.2 | 84.1 | 59.9 | 106.6 | 82.4 | 129.2 | 105.0 | 75.6 | 51.4 |
| | 12 | | | | | | | 56.8 | 30.4 | 79.4 | 53.0 | 101.9 | 75.5 | 124.5 | 98.1 | 82.5 | 56.0 |
| CH105SR | 5 | 51.0 | 33.4 | 67.5 | 49.9 | 100.6 | 83.0 | | | | | | | | | 49.2 | 31.6 |
| | 6 | 44.7 | 23.5 | 61.1 | 40.0 | 94.2 | 73.2 | 127.3 | 106.2 | | | | | | | 59.1 | 38.0 |
| | 7 | 38.4 | 13.7 | 54.9 | 30.3 | 87.9 | 63.4 | 121.0 | 96.4 | | | | | | | 68.9 | 44.3 |
| | 8 | | | 48.5 | 20.4 | 81.6 | 53.5 | 114.7 | 86.5 | 147.7 | 119.6 | 180.8 | 152.7 | | | 78.7 | 50.6 |
| | 9 | | | | | 75.3 | 43.7 | 108.4 | 76.8 | 141.5 | 109.8 | 174.5 | 142.9 | | | 88.6 | 56.9 |
| | 10 | | | | | 68.9 | 33.4 | 102.0 | 66.5 | 135.1 | 99.6 | 168.2 | 132.6 | 201.2 | 165.7 | 98.4 | 63.3 |
| | 11 | | | | | | | 95.7 | 57.0 | 128.7 | 90.1 | 161.8 | 123.1 | 194.8 | 156.2 | 108.3 | 69.6 |
| | 12 | | | | | | | 89.4 | 47.5 | 122.5 | 80.6 | 155.5 | 113.6 | 188.6 | 146.7 | 118.1 | 75.9 |

(Unit: Nm)

# 單動汽缸輸出力矩 Output Torque of Spring Return Actuators

## 氣源克服彈簧輸出力矩 Output torque of air to springs

| Model 型號 | Air pressure 氣源壓力 | 2.5Bar | | 3Bar | | 4Bar | | 5Bar | | 6Bar | | 7Bar | | 8Bar | | Springs' output 彈簧輸出力矩 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Spring Q.ty 彈簧數量 | 0° Start 開始 | 90° End 結束 | 0° Start 開始 | 90° End 結束 | 0° Start 開始 | 90° End 結束 | 0° Start 開始 | 90° End 結束 | 0° Start 開始 | 90° End 結束 | 0° Start 開始 | 90° End 結束 | 0° Start 開始 | 90° End 結束 | 90° Start 開始 | 0° End 結束 |
| CH125SR | 5 | 73 | 47 | 98 | 72 | 148 | 122 | | | | | | | | | 79 | 52 |
| | 6 | 63 | 31 | 88 | 56 | 138 | 107 | 188 | 157 | | | | | | | 94 | 63 |
| | 7 | 52 | 15 | 77 | 40 | 127 | 90 | 178 | 141 | | | | | | | 110 | 73 |
| | 8 | | | 67 | 25 | 117 | 75 | 167 | 125 | 217 | 176 | 268 | 226 | | | 125 | 84 |
| | 9 | | | | | 107 | 59 | 157 | 109 | 207 | 159 | 257 | 210 | | | 141 | 94 |
| | 10 | | | | | 96 | 44 | 146 | 94 | 196 | 144 | 247 | 194 | 297 | 245 | 157 | 105 |
| | 11 | | | | | | | 136 | 78 | 186 | 128 | 236 | 178 | 286 | 228 | 173 | 115 |
| | 12 | | | | | | | 125 | 63 | 176 | 113 | 226 | 163 | 276 | 213 | 188 | 125 |
| CH140SR | 5 | 128 | 85 | 171 | 127 | 256 | 213 | | | | | | | | | 129 | 86 |
| | 6 | 111 | 59 | 154 | 102 | 239 | 187 | 325 | 273 | | | | | | | 155 | 103 |
| | 7 | 94 | 33 | 137 | 76 | 222 | 162 | 308 | 247 | | | | | | | 181 | 120 |
| | 8 | | | 120 | 50 | 205 | 136 | 291 | 221 | 376 | 307 | 462 | 392 | | | 206 | 137 |
| | 9 | | | | | 187 | 110 | 273 | 196 | 358 | 281 | 444 | 367 | | | 232 | 155 |
| | 10 | | | | | 170 | 84 | 256 | 169 | 341 | 255 | 427 | 340 | 512 | 426 | 258 | 172 |
| | 11 | | | | | | | 238 | 143 | 324 | 229 | 409 | 314 | 495 | 400 | 284 | 189 |
| | 12 | | | | | | | 221 | 118 | 307 | 203 | 392 | 289 | 478 | 374 | 310 | 206 |
| CH160SR | 5 | 193 | 124 | 259 | 191 | 392 | 324 | | | | | | | | | 208 | 140 |
| | 6 | 165 | 83 | 232 | 149 | 365 | 282 | 498 | 415 | | | | | | | 250 | 168 |
| | 7 | 137 | 41 | 203 | 107 | 336 | 240 | 469 | 373 | | | | | | | 292 | 196 |
| | 8 | | | 176 | 66 | 309 | 199 | 442 | 237 | 575 | 465 | 708 | 598 | | | 333 | 223 |
| | 9 | | | | | 280 | 157 | 413 | 290 | 546 | 423 | 679 | 556 | | | 375 | 251 |
| | 10 | | | | | 253 | 115 | 386 | 248 | 519 | 381 | 652 | 514 | 785 | 647 | 417 | 279 |
| | 11 | | | | | | | 358 | 207 | 491 | 340 | 624 | 473 | 757 | 606 | 458 | 307 |
| | 12 | | | | | | | 330 | 165 | 463 | 298 | 596 | 431 | 729 | 564 | 500 | 335 |
| CH190SR | 5 | 332 | 222 | 438 | 329 | 651 | 542 | | | | | | | | | 309 | 200 |
| | 6 | 292 | 161 | 398 | 267 | 611 | 480 | 824 | 693 | | | | | | | 371 | 240 |
| | 7 | 252 | 99 | 358 | 205 | 571 | 418 | 784 | 631 | | | | | | | 433 | 280 |
| | 8 | | | 318 | 143 | 531 | 356 | 744 | 569 | 957 | 782 | 1169 | 995 | | | 495 | 320 |
| | 9 | | | | | 491 | 295 | 704 | 507 | 917 | 720 | 1130 | 933 | | | 557 | 360 |
| | 10 | | | | | 451 | 233 | 664 | 446 | 877 | 658 | 1090 | 871 | 1302 | 1084 | 618 | 400 |
| | 11 | | | | | | | 624 | 384 | 837 | 597 | 1050 | 809 | 1263 | 1022 | 680 | 440 |
| | 12 | | | | | | | 584 | 322 | 797 | 535 | 1010 | 748 | 1223 | 960 | 742 | 480 |
| CH210SR | 5 | 390 | 285 | 523 | 418 | 789 | 684 | | | | | | | | | 380 | 275 |
| | 6 | 335 | 209 | 468 | 342 | 734 | 608 | 1000 | 874 | | | | | | | 456 | 330 |
| | 7 | 280 | 133 | 413 | 266 | 679 | 532 | 945 | 798 | | | | | | | 532 | 385 |
| | 8 | | | 358 | 190 | 624 | 456 | 890 | 722 | 1156 | 988 | 1422 | 1254 | | | 608 | 440 |
| | 9 | | | | | 569 | 380 | 835 | 646 | 1101 | 912 | 1367 | 1178 | | | 684 | 495 |
| | 10 | | | | | 514 | 304 | 780 | 570 | 1046 | 836 | 1312 | 1102 | 1578 | 1368 | 760 | 550 |
| | 11 | | | | | | | 725 | 494 | 991 | 760 | 1257 | 1026 | 1523 | 1292 | 836 | 605 |
| | 12 | | | | | | | 670 | 418 | 936 | 684 | 1202 | 950 | 1468 | 1216 | 912 | 660 |
| CH240SR | 5 | 552 | 409 | 744 | 600 | 1129 | 985 | | | | | | | | | 554 | 410 |
| | 6 | 470 | 297 | 662 | 489 | 1047 | 874 | 1432 | 1259 | | | | | | | 665 | 492 |
| | 7 | 388 | 187 | 580 | 379 | 964 | 764 | 1349 | 1149 | | | | | | | 775 | 575 |
| | 8 | | | 498 | 268 | 883 | 653 | 1267 | 1037 | 1652 | 1422 | 2037 | 1807 | | | 886 | 656 |
| | 9 | | | | | 800 | 542 | 1185 | 926 | 1569 | 1311 | 1954 | 1696 | | | 998 | 739 |
| | 10 | | | | | 718 | 431 | 1103 | 816 | 1488 | 1201 | 1872 | 1586 | 2257 | 1970 | 1108 | 821 |
| | 11 | | | | | | | 1021 | 705 | 1406 | 1090 | 1791 | 1474 | 2176 | 1859 | 1219 | 903 |
| | 12 | | | | | | | 939 | 594 | 1323 | 979 | 1708 | 1363 | 2093 | 1748 | 1330 | 985 |
| CH270SR | 5 | 903 | 675 | 1195 | 968 | 1779 | 1552 | | | | | | | | | 787 | 560 |
| | 6 | 790 | 519 | 1083 | 811 | 1667 | 1396 | 2252 | 1981 | | | | | | | 943 | 672 |
| | 7 | 679 | 361 | 972 | 654 | 1556 | 1238 | 2141 | 1823 | | | | | | | 1101 | 783 |
| | 8 | | | 860 | 497 | 1444 | 1081 | 2029 | 1666 | 2614 | 2252 | 3199 | 2836 | | | 1258 | 895 |
| | 9 | | | | | 1332 | 923 | 1917 | 1509 | 2502 | 2094 | 3087 | 2678 | | | 1416 | 1007 |
| | 10 | | | | | 1220 | 767 | 1805 | 1352 | 2390 | 1937 | 2974 | 2521 | 3560 | 3107 | 1572 | 1119 |
| | 11 | | | | | | | 1693 | 1194 | 2278 | 1779 | 2862 | 2364 | 3448 | 2949 | 1730 | 1231 |
| | 12 | | | | | | | 1582 | 1037 | 2167 | 1623 | 2751 | 2207 | 3336 | 2792 | 1887 | 1342 |


例如：

蝶閥原最大扭矩=104N.m

打開後扭矩104x30%=32N.m

氣源壓力=5Bar

我們可以選擇RT255SR K11

空氣行程0°=136N.m>104N.m

空氣行程90°=78N.m>32N.m

彈簧行程90°=173N.m>32N.m

彈簧行程0°=115N.m>104N.m

以上數據顯示可以滿足該蝶閥的正常啟閉

## 工作技術條件 Operating conditions

1、工作介質

乾燥或潤滑的空氣或無腐蝕性氣體介質中雜質微粒小於30 um。

2、氣源壓力

最小氣源壓力2.5巴，最大氣源壓力8巴。

3、介質環境溫度

標準: -20℃~+80℃

低溫: -35℃~+80℃

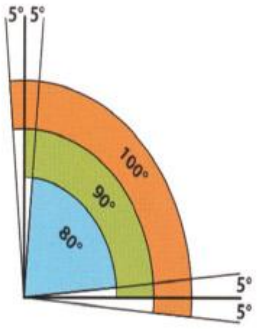
高溫: -150℃~150℃

4、行程調節

0°和90°兩個位置有±5°的調節範圍

5、使用場合

室內或室外安裝




1.Operating media

Dry or lubricated air, or the non-corrosive gases

The maximum particle diameter must less than 30 vm

2. Air supply pressure

The minimum supply pressure is 2.5 Bar

The maximum supply pressure is 8 Bar

3.Operating temperature

Standard:-20℃~+80℃

Low temperature:-35℃~+80℃

High temperature:-15℃~+150℃

4.Travel adjustment

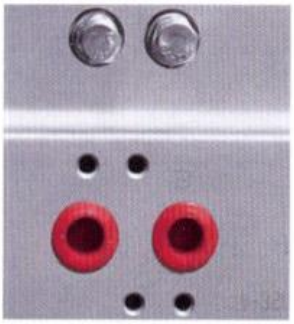
Have adjustment range of± 5° for the rotation at 0° and 90°

5.Application

Either indoor or outdoor

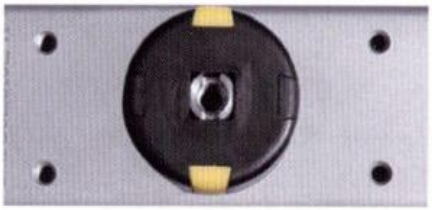
動作形式 Operating Type

單動和雙動 Spring return and Double Acting



氣源接口符合NAMUR標準，可簡單方便地安裝電磁閥。

Air supply connection is designed in accordance with NAMUR Standard to install solenoid valves.



輸出軸的NAMUR標準槽缸體上部標準安裝孔，可使用限位開關、定位器直接齒合和安裝。

The Namur drive pinion and the Namur top mounting connection permit direct installation of accessories such as limit switch box and positioner.

底部安裝孔設計符合ISO5211、DIN3337標準，可以直接安裝離合器(氣動手輪機構)或安裝支架。

Bottom mounting connection is designed in accordance with ISO5211 and DIN3337 standards for direct mounting with valve gear boxes or mounting brackets.

產品序列號、氣源接口及底部安裝孔全部電腦打字，易於辨識和跟蹤服務。

Each actuator is marked with a serial number, air connection and bottom mounting holes are marked for easy track and distinction.