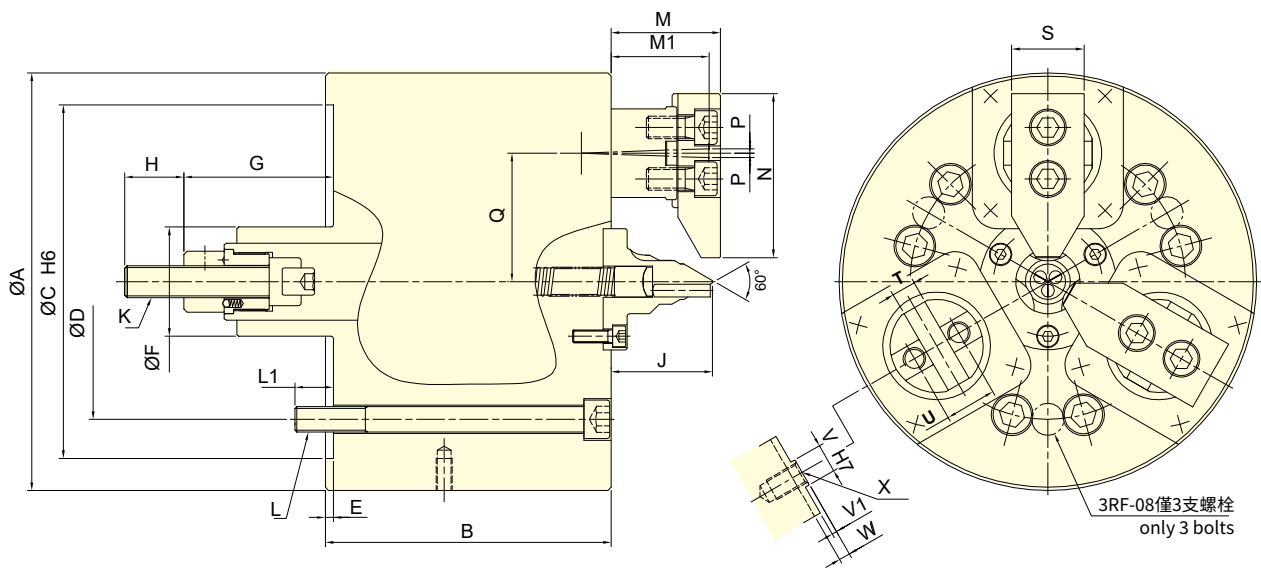
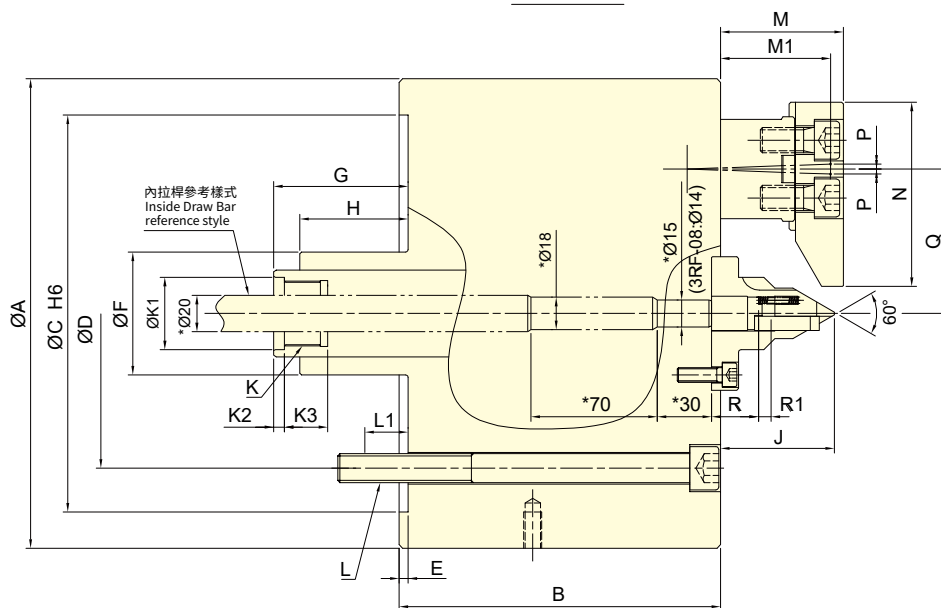




- 工件偏心補償量1mm，中心頂針定位，三爪擺動夾持工件。
- 可以在不反轉工件的情況下進行二次加工，因此大幅減少準備時間。
- 通過補償主爪夾緊進行粗、精加工。內部密封，使維護成本低。
- 搭配雙桿型迴轉缸(3RF-D)。
- 驅動銷推力大小可由迴轉缸壓力控制(3RF-D)。
- The workpiece compensation of eccentric is 1mm, fixed position for the center, swing and grasp the workpiece to three jaw.
- Second machining can be performed without reversing the workpiece, thus significantly reducing setup time.
- With compensating jaws clamping, the Rough and precision machining can be carried out.
- With sealed design, the maintenance costs can be reduced.
- Can be paired with double-rod rotary cylinder (3RF-D type).
- The driver pin thrust can be controlled by the pressure of the rotary cylinder (3RF-D type).



3RF



3RF-D

註.標示[\*]之尺寸為內拉桿製作之尺寸，請勿任意更動。

Note: The dimensions marked [\*] are the dimensions of the inside Draw Bar, Please don't change it.

### 技術規格 SPECIFICATIONS

| 型號      | 楔心行程           | 爪行程<br>(直徑)       | 夾持直徑<br>Chuck Dia. |         | 容許最大入力         | 最大夾持力               | 最高迴轉數                      | I                 | 重量     | 適用迴轉缸         | 補償量          |
|---------|----------------|-------------------|--------------------|---------|----------------|---------------------|----------------------------|-------------------|--------|---------------|--------------|
| Model   | Plunger stroke | Jaw stroke (Dia.) | 最大 Max.            | 最小 Min. | Max. D.B. pull | Max. clamping force | Max. speed                 | Moment of inertia | Weight | Matching cyl. | Compensation |
|         | mm             | mm                | mm                 | mm      | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg·m <sup>2</sup> | kg     |               | mm           |
| 3RF-08  | 43.5           | 9.4               | 70                 | 18      | 39.2 (4000)    | 39.2 (4000)         | 4000                       | 0.15              | 39.4   | RS-1250       | 1            |
| 3RF-08D | 43.5           | 9.4               | 70                 | 18      | 39.2 (4000)    | 39.2 (4000)         | 4000                       | 0.15              | 38.6   | RDL-160S      | 1            |
| 3RF-10  | 50             | 11                | 85                 | 25      | 44.1(4500)     | 67.4(6873)          | 3500                       | 0.56              | 68.3   | RS-1550       | 1            |
| 3RF-10D | 50             | 11                | 85                 | 25      | 44.1(4500)     | 67.4(6873)          | 3500                       | 0.56              | 67.5   | RDL-160S      | 1            |
| 3RF-12  | 52             | 11.2              | 110                | 25      | 78.4(8000)     | 99(10000)           | 2500                       | 0.56              | 109    | RS-2060       | 1            |
| 3RF-12D | 52             | 11.2              | 110                | 25      | 78.4(8000)     | 99(10000)           | 2500                       | 0.56              | 107.7  | RDL-160S      | 1            |

### 外型尺寸 DIMENSIONS

| Model   | A   | B   | C (H6) | D     | E | F  | G max. | G min. | H  | J  | K       | K1 (H7) | K2 | K3 | L     | L1 |
|---------|-----|-----|--------|-------|---|----|--------|--------|----|----|---------|---------|----|----|-------|----|
| 3RF-08  | 210 | 155 | 170    | 133.4 | 5 | 68 | 123    | 79.5   | 37 | 58 | M20x2.5 | -       | -  | -  | 3~M12 | 18 |
| 3RF-08D | 210 | 155 | 170    | 133.4 | 5 | 68 | 98     | 54.5   | 50 | 58 | M36x1.5 | 40.5    | 6  | 24 | 3~M12 | 18 |
| 3RF-10  | 260 | 178 | 220    | 171.4 | 5 | 68 | 143    | 93     | 37 | 63 | M20x2.5 | -       | -  | -  | 6~M16 | 24 |
| 3RF-10D | 260 | 178 | 220    | 171.4 | 5 | 68 | 116.5  | 66.5   | 60 | 63 | M36x1.5 | 40.5    | 6  | 24 | 6~M16 | 26 |
| 3RF-12  | 315 | 190 | 220    | 171.4 | 5 | 76 | 167    | 115    | 46 | 70 | M24x3   | -       | -  | -  | 6~M16 | 24 |
| 3RF-12D | 315 | 190 | 220    | 171.4 | 5 | 76 | 135    | 83     | 75 | 70 | M40x1.5 | 44.5    | 6  | 28 | 6~M16 | 24 |

| Model   | M max. | M min. | M1 | N   | P    | Q   | R    | R1 max. | R1 min. | S  | T(H7) | U  | V  | V1 | W | X   |
|---------|--------|--------|----|-----|------|-----|------|---------|---------|----|-------|----|----|----|---|-----|
| 3RF-08  | 62     | 31     | 58 | 78  | 2.35 | 62  | -    | -       | -       | 40 | 12    | 26 | 16 | 3  | 7 | M12 |
| 3RF-08D | 62     | 31     | 58 | 78  | 2.35 | 62  | 25.5 | 7       | 0       | 40 | 12    | 26 | 16 | 3  | 7 | M12 |
| 3RF-10  | 68     | 35.5   | 61 | 102 | 2.75 | 80  | -    | -       | -       | 45 | 15    | 32 | 18 | 3  | 7 | M14 |
| 3RF-10D | 68     | 35.5   | 61 | 102 | 2.75 | 80  | 28   | 7       | 0       | 45 | 15    | 32 | 18 | 3  | 7 | M14 |
| 3RF-12  | 76     | 43     | 63 | 125 | 2.8  | 100 | -    | -       | -       | 50 | 17    | 36 | 20 | 3  | 7 | M16 |
| 3RF-12D | 76     | 43     | 63 | 125 | 2.8  | 100 | 28   | 7       | 0       | 50 | 17    | 36 | 20 | 3  | 7 | M16 |

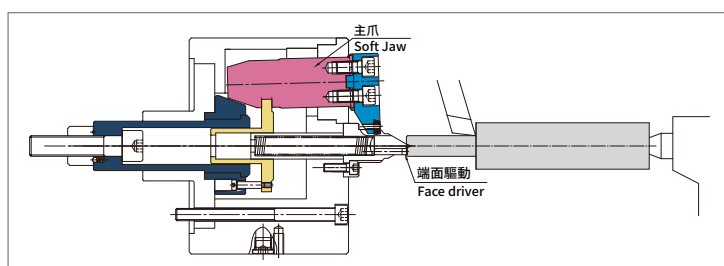
### 應用說明 Application Notes

#### 1.加工夾持直徑

補償主爪縮回，工件在中心頂針與尾座頂針間支撐，並透過端面驅動來操作。

#### 1.Clamping diameter machining

The compensating jaws are retracted. The workpiece is clamped between chuck center and tailstock center. Additionally, it is driven by the face driver.

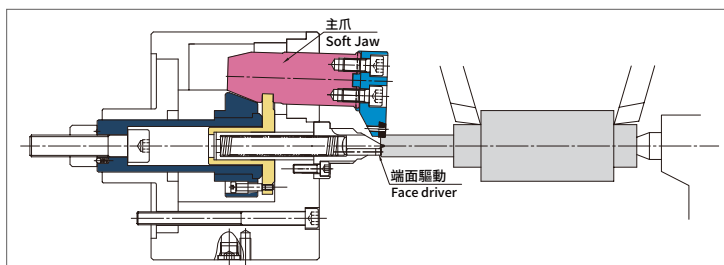


#### 2.粗加工

通過補償主爪夾緊進行粗加工。

#### 2.Rough machining

With compensating jaws clamping, the rough machining can be carried out.



#### 3.精加工

補償主爪縮回，工件在中心頂針與尾座頂針間支撐，並透過端面驅動完成加工，可加工所有的部位，並可達到同心度的要求。

#### 3.Finish machining

Additionally, it is driven by the face driver. The entire workpiece can be machined with precise concentricity.

