



- CRANK type 3-jaw with the large through-hole, and extra long jaw stroke.
  - Matching surfaces of all parts hardened, ground and lubricated directly.
  - High rigidity and high clamping accuracy.
- J is the hole diameter of blank draw nut.  
K is the maximum thread specification and it could be customize.

**3L-15A8**  
Refer to Fig.A

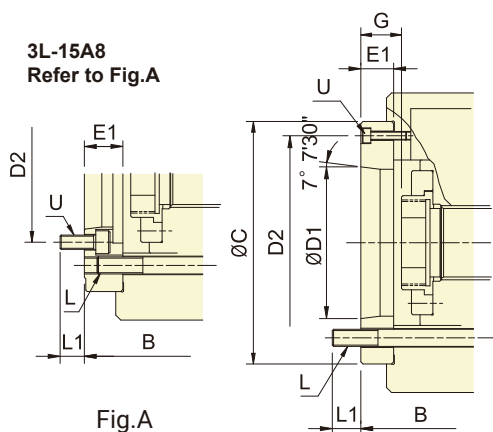
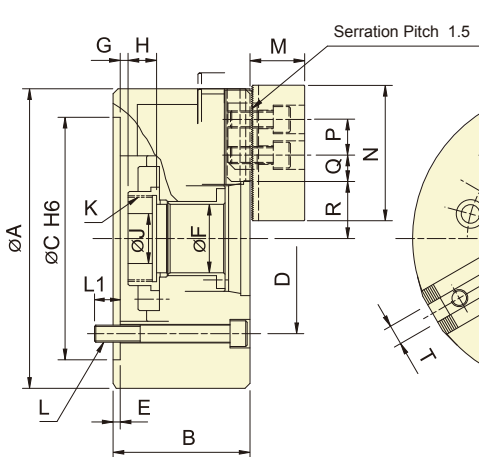


Fig.A

**3L-A**



**3L**

**3L-208A5**  
**3L-210A6**  
Refer to Fig.B

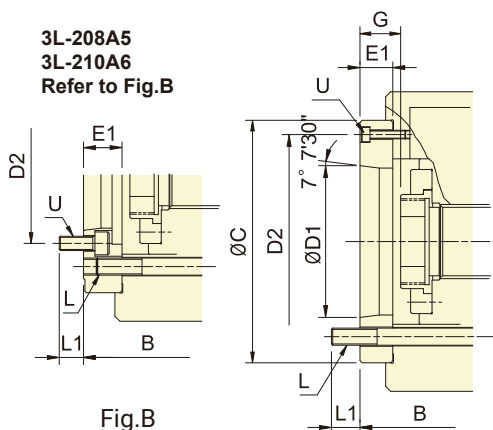
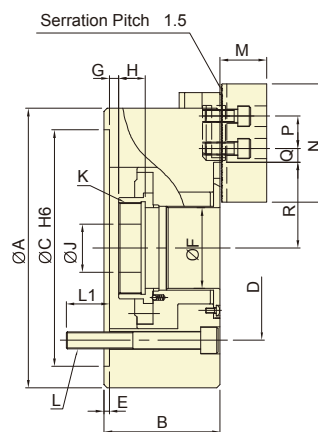


Fig.B

**3L-2A**



**3L-2**

Subject to technical changes

#### SPECIFICATIONS

| Model  |     | Plunger stroke | Jaw stroke (Dia.) | Chucking Dia. |      | Max. D.B. pull | Max. Clamping force | Max. speed                 | I                 | Weight |      | Matching cyl. | Max. pressure              |
|--------|-----|----------------|-------------------|---------------|------|----------------|---------------------|----------------------------|-------------------|--------|------|---------------|----------------------------|
|        |     |                |                   | Max.          | Min. |                |                     |                            | Moment of inertia |        |      |               | MPa (kgf/cm <sup>2</sup> ) |
|        |     | mm             | mm                | mm            | mm   | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg·m <sup>2</sup> | kg     |      |               |                            |
| 3L-205 | A4  | 12             | 18                | 138           | 6    | 15.6(1590)     | 17.2(1750)          | 4200                       | 0.019             | 7.2    | 8    | TK-A533       | 2.3(23)                    |
| 3L-206 | A5  | 15             | 24                | 170           | 24   | 23.5(2400)     | 26.0(2650)          | 3600                       | 0.063             | 14.7   | 15.9 | TK-C646       | 2.7(27)                    |
| 3L-208 | A5  | 20             | 32                | 215           | 30   | 34.3(3500)     | 35.0(3570)          | 3000                       | 0.18              | 23     | 25.7 | TK-A853       | 2.8(28)                    |
| 3L-208 | A6  | 20             | 32                | 215           | 30   | 34.3(3500)     | 35.0(3570)          | 3000                       | 0.18              | 23     | 24.6 | TK-A853       | 2.8(28)                    |
| 3L-210 | A6  | 25             | 37.5              | 260           | 53   | 47.7(4870)     | 48.0(4895)          | 2400                       | 0.35              | 39.5   | 46.5 | TK-A1075      | 3.1(31)                    |
| 3L-210 | A8  | 25             | 37.5              | 260           | 53   | 47.7(4870)     | 48.0(4895)          | 2400                       | 0.35              | 39.5   | 45   | TK-A1075      | 3.1(31)                    |
| 3L-212 | A8  | 30             | 45                | 315           | 61   | 64.7(6600)     | 61.0(6220)          | 2100                       | 0.827             | 67.3   | 70.5 | TK-A1291      | 3.0(30)                    |
| 3L-15  | A8  | 35             | 52                | 385           | 26   | 84.3(8600)     | 68.0(6930)          | 1600                       | 2.58              | 136    | 150  | TK-A1512      | 2.7(27)                    |
| 3L-15  | A11 | 35             | 52                | 385           | 26   | 84.3(8600)     | 68.0(6930)          | 1600                       | 2.58              | 136    | 143  | TK-A1512      | 2.7(27)                    |

1. The dimensions and the specifications of 3L-A type are in red data.

## DIMENSIONS

| Model  |     | A   | B   |     | C   | D     | D1     | D2    | E | E1 | F   | G max. |      | G min. |      | H  | J  |
|--------|-----|-----|-----|-----|-----|-------|--------|-------|---|----|-----|--------|------|--------|------|----|----|
| 3L-205 | A4  | 138 | 65  | 76  | 110 | 82.6  | 63.51  | 96    | 4 | 15 | 32  | 1      | 15   | -11    | 3    | 20 | 12 |
| 3L-206 | A5  | 170 | 84  | 97  | 140 | 104.8 | 82.56  | 116   | 5 | 18 | 45  | 6.5    | 24.5 | -8.5   | 9.5  | 19 | 20 |
| 3L-208 | A5  | 215 | 96  | 114 | 170 | 133.4 | 82.56  | 104.8 | 5 | 23 | 52  | 7      | 30   | -13    | 10   | 20 | 30 |
| 3L-208 | A6  | 215 | 96  | 114 | 170 | 133.4 | 106.38 | 150   | 5 | 23 | 52  | 7      | 30   | -13    | 10   | 20 | 30 |
| 3L-210 | A6  | 260 | 108 | 128 | 220 | 171.4 | 106.38 | 133.4 | 5 | 25 | 75  | 8.5    | 33   | -16.5  | 8    | 25 | 45 |
| 3L-210 | A8  | 260 | 108 | 121 | 220 | 171.4 | 139.72 | 190   | 5 | 18 | 75  | 8.5    | 26.5 | -16.5  | 1.5  | 25 | 45 |
| 3L-212 | A8  | 315 | 125 | 138 | 220 | 171.4 | 139.72 | 190   | 5 | 18 | 91  | 15     | 33   | -15    | 3    | 30 | 50 |
| 3L-15  | A8  | 385 | 150 | 177 | 300 | 235   | 139.72 | 171.4 | 6 | 33 | 120 | 12.5   | 45.5 | -22.5  | 10.5 | 39 | 60 |
| 3L-15  | A11 | 385 | 150 | 166 | 300 | 235   | 196.87 | 260   | 6 | 22 | 120 | 12.5   | 34.5 | -22.5  | -0.5 | 39 | 60 |

| Model  |     | K max.  |       | L     | L1 |    | M  | N   | P  | Q max. | Q min. | R max. | R min. | S  | T    | U     |
|--------|-----|---------|-------|-------|----|----|----|-----|----|--------|--------|--------|--------|----|------|-------|
| 3L-205 | A4  | M40x1.5 |       | 3~M10 | 15 | 15 | 31 | 62  | 14 | 15.75  | 5.25   | 38.5   | 29.5   | 25 | 10   | 3~M6  |
| 3L-206 | A5  | M55x2   |       | 3~M10 | 18 | 15 | 37 | 73  | 20 | 15.25  | 7.75   | 51     | 39     | 31 | 12   | 3~M6  |
| 3L-208 | A5  | M60x2   |       | 3~M12 | 18 | 19 | 38 | 95  | 25 | 19.25  | 10.25  | 63.5   | 47.5   | 35 | 14   | 6~M10 |
| 3L-208 | A6  | M60x2   |       | 3~M12 | 18 | 20 | 38 | 95  | 25 | 19.25  | 10.25  | 63.5   | 47.5   | 35 | 14   | 3~M6  |
| 3L-210 | A6  | M85x2   | M60x2 | 3~M16 | 24 | 20 | 43 | 110 | 30 | 24.75  | 11.25  | 80     | 61.25  | 40 | 16   | 3~M12 |
| 3L-210 | A8  | M85x2   |       | 3~M16 | 24 | 21 | 43 | 110 | 30 | 24.75  | 11.25  | 80     | 61.25  | 40 | 16   | 3~M8  |
| 3L-212 | A8  | M100x2  |       | 3~M16 | 24 | 21 | 51 | 130 | 30 | 29.75  | 13.25  | 96.5   | 74     | 50 | 21   | 3~M8  |
| 3L-15  | A8  | M130x2  |       | 6~M20 | 33 | 31 | 63 | 165 | 43 | 51.25  | 27.25  | 94.25  | 68.25  | 62 | 25.5 | 6~M16 |
| 3L-15  | A11 | M130x2  |       | 6~M20 | 33 | 31 | 63 | 165 | 43 | 51.25  | 27.25  | 94.25  | 68.25  | 62 | 25.5 | 3~M10 |