

REPLACEMENT ACCESSORIES



Power Chuck

- Soft / Hard Jaws
- T-Nuts, Grease
- Adaptor Plates

126.

127.

128.

Manual Chuck

- Jaws
- Adaptor Plates
- Etcetera

129.

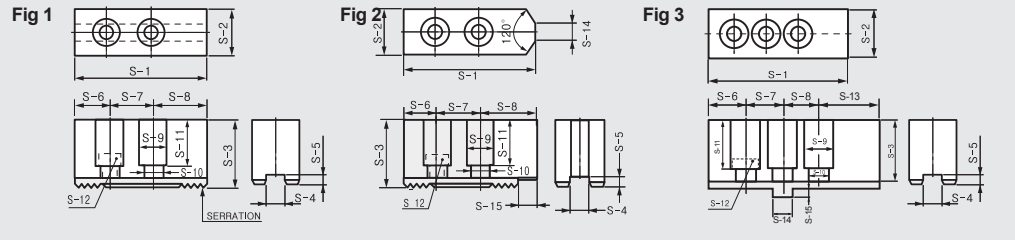
131.

131.

Replacement Accessories

Power Chuck

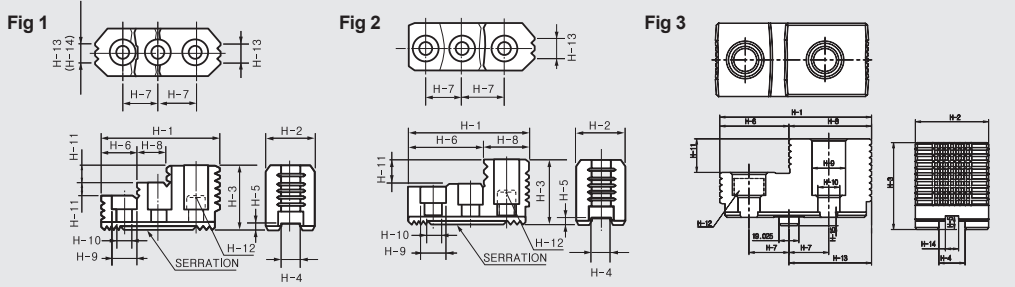
SOFT JAWS



Dimensions

| | FIG | Serration Pitch | S-1 | S-2 | S-3 | S-4 | S-5 | S-6 | S-7 | S-8 | S-9 | S-10 | S-11 | S-12 | S-13 | S-14 | S-15 | Corresponding |
|---------|-----|-----------------|-----|-----|-----|------|-----|------|------|------|------|------|------|--------|-------|--------|------|--|
| SB04C1 | 2 | 1.5×60° | 48 | 19 | 23 | 8 | 3 | 8 | 15 | 25 | 11 | 7 | 15 | M6×16 | 6 | - | - | HCH-04 |
| SB04B1 | 2 | 1.5×60° | 55 | 23 | 25 | 10 | 4 | 13 | 14 | 28 | 13.5 | 8.5 | 16 | M8×22 | - | 3 | 13 | HC-04 |
| SB05B1 | 2 | 1.5×60° | 62 | 23 | 27 | 10 | 4 | 14 | 19 | 29 | 13.5 | 8.5 | 18 | M8×22 | - | 12 | - | HC-05 |
| SB05N1 | 2 | 1.5×60° | 54 | 23 | 25 | 10 | 4 | 12 | 14 | 28 | 13.5 | 8.5 | 16.5 | M8×20 | - | 5 | - | HS-05 |
| SB06B1 | 2 | 1.5×60° | 72 | 31 | 32 | 12 | 5 | 15 | 20 | 37 | 17 | 11 | 20 | M10×30 | - | 12 | - | HS/HCH/HC-06, MH-206 |
| SB08B1 | 2 | 1.5×60° | 95 | 35 | 38 | 14 | 5 | 24 | 25 | 46 | 19 | 13 | 23 | M12×35 | - | 12 | - | HCH/HC/HS-08, MH-208 |
| SB10B1 | 2 | 1.5×60° | 110 | 40 | 42 | 16 | 5 | 30 | 30 | 50 | 19 | 13 | 27 | M12×35 | - | 15 | 20 | HCH/HC/HS-10, MH-210 |
| SB12A1 | 1 | 1.5×60° | 129 | 50 | 50 | 18 | 5 | 39 | 30 | 60 | 23 | 15 | 30 | M14×45 | - | - | - | HC/HCH-12 |
| SB12N1 | 1 | 1.5×60° | 111 | 50 | 50 | 21 | 4 | 21 | 30 | 60 | 25 | 17 | 33 | M16×40 | - | - | - | HS-12, MH-212 |
| SB15C1 | 1 | 1.5×60° | 165 | 62 | 66 | 22 | 8 | 37 | 43 | 85 | 32 | 21 | 42 | M20×60 | - | - | - | HCH-15, HCH-18 |
| SB15N1 | 1 | 1.5×60° | 135 | 50 | 60 | 25.5 | 5 | 26 | 43 | 66 | 32 | 21 | 39 | M20×55 | - | - | - | HC-15, HC-18 |
| SB15A2 | 1 | 3.0×60° | 165 | 62 | 66 | 22 | 8 | 30 | 50 | 85 | 32 | 21 | 42 | M20×60 | - | - | - | MH-218 |
| SB18A2 | 1 | 3.0×60° | 180 | 65 | 70 | 25 | 9 | 40 | 60 | 80 | 32 | 21 | 45 | M20×60 | - | - | - | HC/HCH-21, HC/HCH-24, MH-221, 224 |
| SB32B2 | 1 | 3.0×60° | 160 | 75 | 75 | 25.5 | 7 | 25 | 38 | 97 | 32 | 22 | 54 | M20 | - | - | - | HCH-32 [Serration] |
| SB32GB | 3 | - | 165 | 75 | 83 | 12.7 | 13 | 21.9 | 76.2 | - | 32 | 22 | 59 | M20 | - | 19.025 | - | HC-32 [Groove] |
| SB32SB2 | 1 | 3.0×60° | 185 | 75 | 75 | 25.5 | 7.5 | 26.8 | 38.1 | 82 | 32 | 22 | 57 | M20 | 82 | - | - | HC-32 [Serration] |
| SB40GB | 3 | - | 270 | 110 | 117 | 30 | 13 | 48.8 | 76.2 | 76.2 | 39 | 26 | 90 | M24 | 68.8 | 19.025 | - | HC-40 [Groove] / 50, 55, 63, 70, 80 |
| SB40SB2 | 1 | 3.0×60° | 270 | 110 | 110 | 30 | 7.5 | 32.5 | 60 | - | 39 | 26 | 90 | M24 | 117.5 | - | 85 | HC-40 [Serration] / 50, 55, 63, 70, 80 |

HARD JAWS

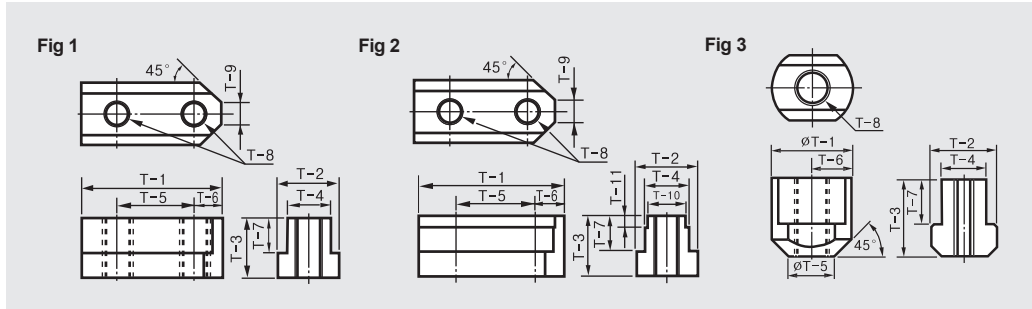


Dimensions

| | FIG | Serration Pitch | H-1 | H-2 | H-3 | H-4 | H-5 | H-6 | H-7 | H-8 | H-9 | H-10 | H-11 | H-12 | H-13 | H-14 | H-15 | Corresponding |
|---------|-----|-----------------|-------|-----|------|------|-----|-------|-------|------|------|------|------|------|------|------|------|--|
| HB04N1 | 2 | 1.5×60° | 53 | 23 | 27.5 | 10 | 4 | 30.5 | 14 | 22.5 | 13.5 | 8.5 | 10 | M8 | 6 | - | - | HS-04, HS-05 |
| HB06A1 | 1 | 1.5×60° | 67 | 31 | 41 | 12 | 5 | 18 | 20 | 17 | 17 | 11 | 9 | M10 | 10 | 10 | - | HC/HCH/HS-06, MH-206 |
| HB08A1 | 1 | 1.5×60° | 86 | 35 | 51 | 14 | 5 | 31 | 25 | 18 | 19 | 13 | 12 | M12 | 12 | 12 | - | HC/HCH/HS-08, MH-208 |
| HB10A1 | 1 | 1.5×60° | 99.5 | 40 | 54 | 16 | 5 | 43 | 30 | 17 | 19 | 13 | 13 | M12 | 15 | 15 | - | HC/HCH/HS-10, MH-210 |
| HB12B1 | 2 | 1.5×60° | 97.5 | 50 | 55 | 18 | 5 | 64.5 | 30 | 33 | 22 | 15 | 20 | M14 | 18 | - | - | HC/HCH-12 |
| HB12N1 | 2 | 1.5×60° | 103 | 50 | 52 | 21 | 4 | 62.5 | 30 | 40.5 | 25 | 17 | 17 | M16 | 30 | - | - | HS-12, MH-212 |
| HB15A1 | 1 | 1.5×60° | 149 | 62 | 86 | 22 | 9 | 63 | 43 | 34 | 32 | 21 | 20 | M20 | 40 | 40 | - | HCH-15, HCH-18 |
| HB15A2 | 1 | 3.0×60° | 149 | 62 | 86 | 22 | 9 | 63 | 50 | 34 | 32 | 21 | 20 | M20 | 40 | 40 | - | MH-218 |
| HB15N1 | 1 | 1.5×60° | 149 | 62 | 86 | 25.5 | 5 | 69 | 43 | 27 | 32 | 21 | 20 | M20 | 43 | 38 | - | HC-15, HC-18 |
| HB18B2 | 2 | 3.0×60° | 159.5 | 80 | 90 | 25 | 9 | 104.5 | 50 | 55 | 32 | 21 | 40 | M20 | 55 | - | - | HC/HCH-21, HC/HCH-24, MH-221, 224 |
| HB32B2 | 2 | 3.0×60° | 145 | 70 | 75 | 25.5 | 7 | 66 | 76.2 | 79 | 32 | 21 | 32 | M20 | - | - | - | HCH-32 [Serration] |
| HB32GB | 3 | - | 145 | 70 | 83 | 25 | 13 | 66 | 38.1 | 79 | 32 | 21 | 32 | M20 | 79 | 12.7 | 8 | HC-32 [Groove] |
| HB32SB2 | 2 | 3.0×60° | 168 | 70 | 75 | 25.5 | 7.5 | 89 | 38.1 | 79 | 32 | 21 | 32 | M20 | - | - | - | HC-32 [Serration] |
| HB40GB | 3 | - | 223 | 80 | 124 | 30 | 15 | 133 | 38.1 | 90 | 39 | 26 | 55 | M24 | 83 | - | 7 | HC-40 [Groove] / 50, 55, 63, 70, 80 |
| HB40SB2 | 2 | 3.0×60° | 223 | 80 | 117 | 30 | 8 | 133 | 114.3 | 90 | 39 | 26 | 55 | M24 | - | - | - | HC-40 [Serration] / 50, 55, 63, 70, 80 |

Power Chuck

T-NUT



Dimensions

| | FIG | T-1 | T-2 | T-3 | T-4 | T-5 | T-6 | T-7 | T-8 | T-9 | T-10 | T-11 | Corresponding |
|--------------|-----|------|------|-------|------|------|------|-------|-----|-----|------|------|---|
| TN-HCH-04 | 1 | 24.5 | 11.5 | 13.5 | 8 | 15 | 4.5 | 9 | M6 | 5 | - | - | HCH Type of 4" Chuck |
| TN-HS-04/05 | 1 | 26 | 15 | 15 | 10 | 14 | 6 | 9.5 | M8 | 5 | - | - | HS Type of 04", 05" Chuck |
| TN-HC-04 | 1 | 28 | 15 | 18 | 10 | 14 | 7 | 12.5 | M8 | 5 | - | - | HC Type of 4" Chuck |
| TN-HC-05 | 1 | 32 | 15 | 18 | 10 | 19 | 6 | 12.5 | M8 | 6 | - | - | HC Type of 5" Chuck |
| TN-HS-06 | 1 | 36 | 17.5 | 18.5 | 12 | 20 | 8.25 | 11 | M10 | 8 | - | - | HS / MH Type of 06" Chuck |
| TN-HCH/HC-06 | 1 | 36.5 | 17.5 | 22.5 | 12 | 20 | 7.5 | 15 | M10 | 6 | - | - | HCH / HC Type of 06" Chuck |
| TN-HS-08 | 1 | 46.5 | 20.5 | 20.5 | 14 | 25 | 10.5 | 12 | M12 | 12 | - | - | HS / MH Type of 08" Chuck |
| TN-HCH/HC-08 | 1 | 48 | 20.5 | 25.5 | 14 | 25 | 11 | 16 | M12 | 8 | - | - | HCH / HC Type of 08" Chuck |
| TN-HS-10 | 1 | 51 | 22.5 | 21.5 | 16 | 30 | 11 | 13 | M12 | 11 | - | - | HS / MH Type of 10" Chuck |
| TN-HCH/HC-10 | 1 | 55 | 22.5 | 25.5 | 16 | 30 | 11 | 16 | M12 | 8 | - | - | HCH / HC Type of 10" Chuck |
| TN-HS-12 | 1 | 55.5 | 29.5 | 27.75 | 21 | 30 | 12 | 16.25 | M16 | 13 | - | - | HS / MH Type of 12" Chuck |
| TN-HCH/HC-12 | 1 | 55.5 | 26.5 | 33.5 | 18 | 30 | 11.5 | 20 | M14 | 12 | - | - | HCH / HC Type of 12" Chuck |
| TN-HCH-15/18 | 2 | 80 | 33.5 | 45.5 | 24 | 43 | 17 | 29 | M20 | 11 | 22 | 7.5 | HCH Type of 15", 18" Chuck |
| TN-HC-15/18 | 1 | 80 | 35 | 49 | 25.5 | 43 | 17 | 20 | M20 | 11 | - | - | HC Type of 15", 18" Chuck |
| TN-MH-218 | 2 | 80 | 33.5 | 45.5 | 24 | 50 | 17 | 29 | M20 | 16 | - | - | MH-218 |
| TN-HCH-21/24 | 1 | 100 | 37.5 | 45 | 25 | 60 | 20 | 26 | M20 | 11 | 22 | 7.5 | HCH / HCHF-21, 24 (S), MH-221(S) |
| TNX-HC-21/24 | 3 | 46 | 37.5 | 45 | 25 | 26.5 | 23 | 26 | M20 | - | - | - | HC / HCF-21, 24, HCH / HCHF-21, 24 (H), MH-221(H) |
| TN-HCH-32 | 3 | 35 | 35 | 39.5 | 25.5 | 25 | - | 20.5 | M20 | - | - | - | HCH-32 |
| TN-HC-32 | 3 | 37 | 37.5 | 47.5 | 25.5 | - | - | 28.5 | M20 | - | - | - | HC-32 |
| TN-HC-40 | 3 | 42 | 42.5 | 49.5 | 30 | - | - | 30.5 | M24 | - | - | - | HC-40 |

※TNX-HC-21-24 require two T-nuts per jaw.

GREASE

Important for maintenance and safe operation.



SW10

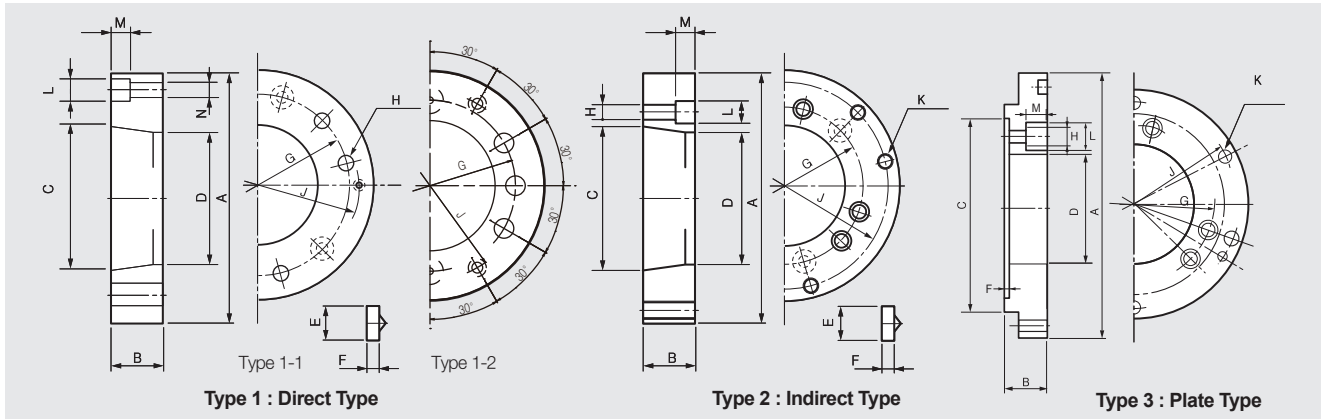
Special grease for manual and power chucks

- Maximum extreme-pressure protection
- Exceptional adhesion & cohesion characteristics
- Superior friction-reduction properties-protects against friction-related heat & wear
- Excellent resistance to water washout & spray off
- Reduces maintenance & downtime
- Reduces operating temperatures
- Extends equipment life.

Replacement Accessories

Power Chuck

Fits ASA B5.9 type A (DIN 55026) Spindles



Adaptors Type 1-1

| | Spindle Nose | A | B | C | D | E | F | G | H | J | K | L | M | N | Corresponding |
|------------|--------------|-----|-------|---------|-------|-------|-----|--------|------|-------|---|----|----|-----|---|
| AP06A05 | A2-5 | 140 | 15 | 82.563 | 79.7 | 16.3 | 6.5 | 104.78 | 12 | 116 | - | 11 | 7 | 6.6 | HC/HCH/HS/HSL-06, MH-206 |
| AP08A06 | A2-6 | 170 | 17 | 106.375 | 103.0 | 19.45 | 6.5 | 133.35 | 13.5 | 150 | - | 11 | 7 | 6.6 | HC/HCH/HS/MH/HSL-08, MH-208 |
| APF08A06 | A2-6 | 170 | 17 | 106.375 | 103.0 | 19.45 | 6.5 | 133.35 | 13.5 | 150 | - | 11 | 7 | 6.6 | HSF/HCHF/HCF/MHF-08 |
| AP10/12A08 | A2-8 | 220 | 18/28 | 139.719 | 103.0 | 24.2 | 8 | 171.45 | 17 | 190 | - | 14 | 10 | 9 | HC/HCH/HS/HSL-10,12, MH-210,212, MH-212, HC-15,18, HCH-15 |
| AP15/18A11 | A2-11 | 300 | 22 | 196.870 | 192.9 | 29.36 | 10 | 235 | 21 | 260 | - | 17 | 11 | 11 | HCH-15, HCF-15,18 |
| APF15A11 | A2-11 | 300 | 22 | 196.870 | 192.9 | 29.36 | 10 | 235 | 21 | 260 | - | 17 | 11 | 11 | HCH-15, HCF-15,18 |
| APF18A11 | A2-11 | 380 | 22 | 196.870 | 192.9 | 29.36 | 10 | 235 | 21 | 320 | - | 17 | 10 | 11 | HCHF-18 |
| APT15A11 | A2-11 | 300 | 22 | 196.870 | 192.9 | 29.36 | 10 | 235 | 21 | 260 | - | 17 | 11 | 11 | HCHT-15 |
| AP18A11 | A2-11 | 380 | 22 | 196.870 | 192.9 | 29.36 | 10 | 235 | 21 | 260 | - | 17 | 11 | 11 | HCH-18 |
| AP21/24A15 | A2-15 | 380 | 27 | 285.777 | 250 | 35.7 | 10 | 330.2 | 24 | 330.2 | - | 20 | 13 | 14 | HC/HCH-21, HC/HCH-24 |

Adaptors Type 1-2

| | Spindle Nose | A | B | C | D | E | F | G | H | J | K | L | M | N | Corresponding |
|-------------|--------------|-----|----|---------|-------|-------|-----|--------|----|-----|---|------|----|-----|----------------|
| APT06A05 | A2-5 | 140 | 15 | 82.563 | 79.7 | 16.3 | 6.5 | 104.78 | 11 | 116 | - | 12 | 7 | 6.6 | HCT/HST/-06 |
| APT08A06 | A2-6 | 170 | 17 | 106.375 | 103.0 | 19.45 | 6.5 | 133.35 | 11 | 150 | - | 13.5 | 7 | 6.6 | HCT/HST/-06 |
| APT10/12A08 | A2-8 | 220 | 18 | 139.719 | 136.0 | 24.2 | 8 | 171.45 | 17 | 190 | - | 14 | 10 | 9 | HCT/HST/-10,12 |

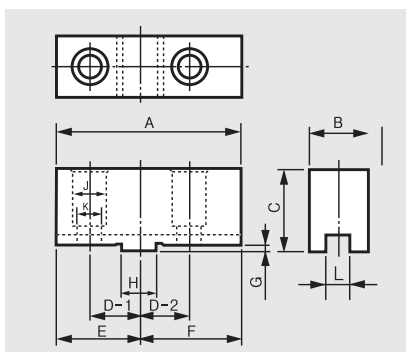
Adaptors Type 2

| | Spindle Nose | A | B | C | D | E | F | G | H | J | K | L | M | N | Corresponding |
|-----------------|--------------|-----|--------|---------|--------|-------|-----|--------|------|--------|----------|------|------|---|--|
| AP06A06 | A2-6 | 140 | 33 | 106.375 | 70 | 19.45 | 6.5 | 133.35 | 14 | 104.78 | M10 | 20 | 18.5 | - | HC/HCH/HS-06 |
| AP08A05 | A2-5 | 170 | 25 | 82.563 | 79.7 | 16.3 | 6.5 | 104.78 | 12 | 133.35 | M12 | 18 | 11.5 | - | HC/HCH/HS/HCT/HSL HST-08, MH-208 |
| AP08A08 | A2-8 | 170 | 30 | 139.719 | 103 | 24.2 | 8 | 171.45 | 18 | 133.35 | M12 | 26 | 23 | - | HC/HCH/HS-08 |
| AP10/12A06 | A2-6 | 220 | 25 | 106.375 | 103.0 | 19.45 | 6.5 | 133.35 | 13.5 | 171.45 | M16 | 20 | 13.5 | - | HC/HS/HCH/HCT/HST/MHF MH/HCF/HSF-10,12 |
| APF10/12A08 | A2-8 | 220 | 18 | 139.719 | 136.0 | 24.2 | 8 | 171.45 | 18 | 171.45 | M16 | 20 | 25 | - | HSF-10, HCF-12 |
| AP15A08 | A2-8 | 300 | 22(33) | 139.719 | 135.46 | 24.2 | 8 | 171.45 | 18 | 235 | M20 | (26) | (17) | - | HCH/HCH-15, HC-18 |
| AP21/24A11 | A2-11 | 380 | 27 | 197.870 | 192.9 | 29.36 | 10 | 235 | 21 | 330.2 | M22 | - | - | - | HC-21, HC-24 (HCH-21, HCH-24) |
| AP21/24A15 | A2-15 | 380 | 42 | 285.775 | - | 35.7 | 10 | 330.2 | 24 | 330.2 | M22 | 35 | 26 | - | HCH/HCH-21, HCH/HCH-24 |
| AP21/24A11(M24) | A2-11 | 380 | 42 | 196.870 | 215 | 29.4 | 10 | 235 | 22 | 330.2 | M22(M24) | 32 | 30 | - | HCHF-21,24/HCF-21,24 MH-224(HC-32) |
| AP32A15 | A2-15 | 380 | 42 | 285.777 | 220 | 35.7 | 10 | 330.2 | 26 | 330.2 | M24 | 39 | 26 | - | HC-32 |
| AP32/40A11 | A2-11 | 520 | 50 | 196.870 | 280 | 29.4 | 10 | 235 | 22 | 463.6 | M24 | 32 | 33 | - | HCH-32, HC-40 |
| AP32/40A15-HK | A2-15 | 520 | 42 | 285.777 | 220 | 35.7 | 10 | 330.2 | 26 | 463.6 | M24 | 39 | 26 | - | HCH-32, HC-40 |

Adaptors Type 3

| | Spindle Nose | A | B | C | D | E | F | G | H | J | K | L | M | N | Corresponding |
|---------|--------------|-----|----|-----|-----|---|---|-------|----|-------|-----|----|---|---|---------------|
| AP40A15 | A2-15 | 520 | 48 | 380 | 270 | - | 8 | 330.2 | 26 | 463.6 | M24 | 39 | - | - | HC-40, HCH-32 |

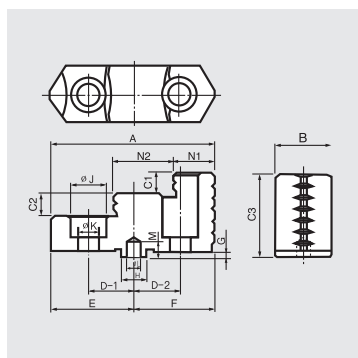
TC / FTC CHUCK SOFT JAWS



| | A | B | C | D-1 | D-2 | E | F | G | H | J | K | L | M |
|--------|-----|----|------|--------|--------|----|----|---|-------|----|------|------|---|
| TC-190 | 88 | 32 | 41 | 22.225 | 22.225 | 40 | 48 | 3 | 12.68 | 17 | 11 | 7.94 | 7 |
| TC-230 | 100 | 32 | 44 | 26.99 | 26.99 | 45 | 55 | 3 | 19.03 | 19 | 12.7 | 12.7 | 7 |
| TC-273 | 110 | 35 | 48.5 | 26.99 | 26.99 | 51 | 59 | 3 | 19.03 | 19 | 12.7 | 12.7 | 7 |
| TC-310 | 125 | 40 | 49.5 | 31.75 | 31.75 | 58 | 67 | 3 | 19.03 | 19 | 12.7 | 12.7 | 7 |

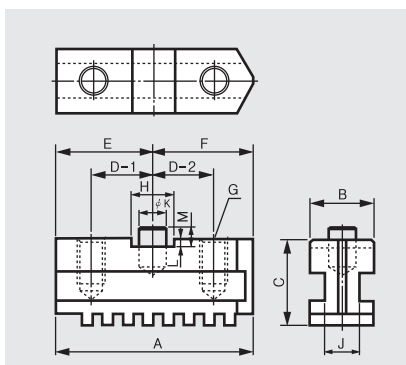
| | A | B | C | D-1 | D-2 | E | F | G | H | J | K | L |
|---------|-----|----|------|------|------|------|------|-----|-------|----|----|------|
| FTC-460 | 140 | 50 | 71.5 | 38.1 | 38.1 | 63.5 | 76.5 | 5.8 | 19.03 | 32 | 22 | 12.7 |
| FTC-535 | 150 | 50 | 76.5 | 38.1 | 38.1 | 67.5 | 82.5 | 6 | 19.03 | 32 | 22 | 12.7 |
| FTC-610 | 150 | 50 | 76.5 | 38.1 | 38.1 | 67.5 | 82.5 | 6 | 19.03 | 32 | 22 | 12.7 |

TC / FTC CHUCK HARD JAWS



| | A | B | C1 | C2 | C3 | D-1 | D-2 | E | F | G | H | φJ | φK | φL | N1 | N2 |
|--------------|-------|----|----|----|------|--------|--------|------|------|-----|--------|----|----|------|------|----|
| TC-190(7") | 80.5 | 28 | 10 | 10 | 41 | 22.225 | 22.225 | 40.5 | 40 | 3 | 12.68 | 17 | 11 | 7.90 | 21.5 | 29 |
| TC-230(9") | 90.5 | 32 | 12 | 12 | 48 | 26.99 | 26.99 | 45.5 | 45 | 3 | 19.03 | 19 | 13 | 12.7 | 23.5 | 33 |
| TC-273(10") | 103.5 | 35 | 14 | 14 | 52 | 26.99 | 26.99 | 52 | 51.5 | 3 | 19.03 | 19 | 13 | 12.7 | 31.5 | 34 |
| TC-310(12") | 115.5 | 40 | 15 | 15 | 54 | 31.75 | 31.75 | 58 | 57.5 | 3 | 19.03 | 19 | 13 | 12.7 | 30.5 | 40 |
| FTC-450(19") | 130 | 50 | 17 | 17 | 76.8 | 38.1 | 38.1 | 63.5 | 66.5 | 5.8 | 19.025 | 32 | 22 | - | 52 | 35 |
| FTC-535(21") | 130 | 50 | 17 | 17 | 76.8 | 38.1 | 38.1 | 63.5 | 66.5 | 5.8 | 19.025 | 32 | 22 | - | 52 | 35 |
| FTC-610(24") | 130 | 50 | 17 | 17 | 76.8 | 38.1 | 38.1 | 63.5 | 66.5 | 5.8 | 19.025 | 32 | 22 | - | 52 | 35 |

TC / FTC CHUCK BASE JAWS



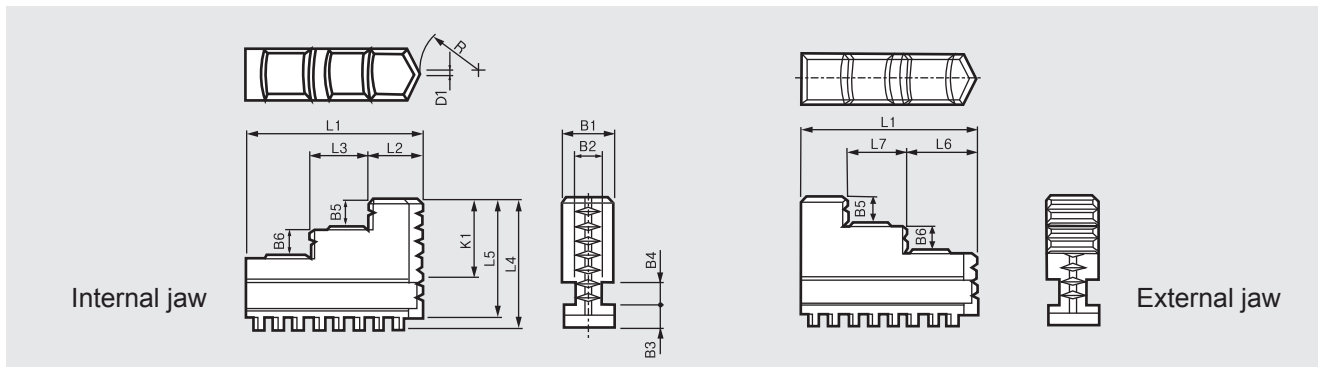
| | A | B | C | D-1 | D-2 | E | F | G | H | J | K | L | M |
|--------|-----|----|------|--------|--------|------|------|-------|-------|------|------|-----|-----|
| TC-190 | 75 | 28 | 34 | 22.225 | 22.225 | 35.5 | 39.5 | 2-M10 | 12.68 | 15 | 7.95 | 3.5 | 6.5 |
| TC-230 | 87 | 28 | 38 | 26.99 | 26.99 | 42.5 | 44.5 | 2-M12 | 19.03 | 15 | 12.7 | 3.5 | 6.5 |
| TC-273 | 98 | 28 | 40 | 26.99 | 26.99 | 47 | 51 | 2-M12 | 19.03 | 15 | 12.7 | 3.5 | 6.5 |
| TC-310 | 111 | 32 | 42.5 | 31.75 | 31.75 | 54 | 57 | 2-M12 | 19.03 | 17.2 | 12.7 | 3.5 | 6.5 |

| | A | B | C | D-1 | D-2 | F | G | H | J | M |
|---------|-----|----|----|------|------|------|-------|----------|----|-----|
| FTC-460 | 165 | 45 | 54 | 38.1 | 38.1 | 66.5 | 4-M20 | 2-19.025 | 27 | 9.3 |
| FTC-535 | 177 | 50 | 57 | 38.1 | 38.1 | 66.5 | 4-M20 | 2-19.025 | 30 | 9.3 |
| FTC-610 | 205 | 50 | 60 | 38.1 | 38.1 | 66.5 | 5-M20 | 3-19.025 | 30 | 9.3 |

Replacement Accessories

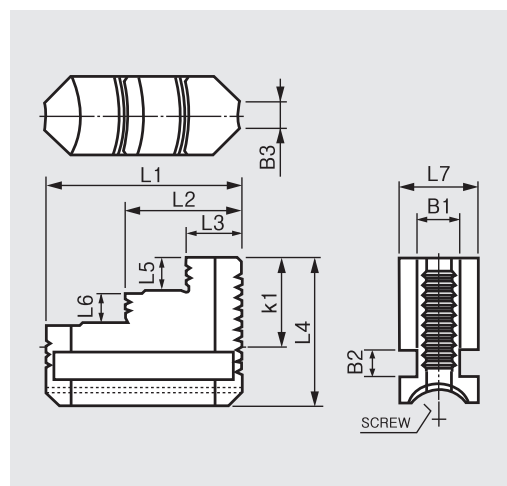
Manual Chuck

SCROLL CHUCK JAWS



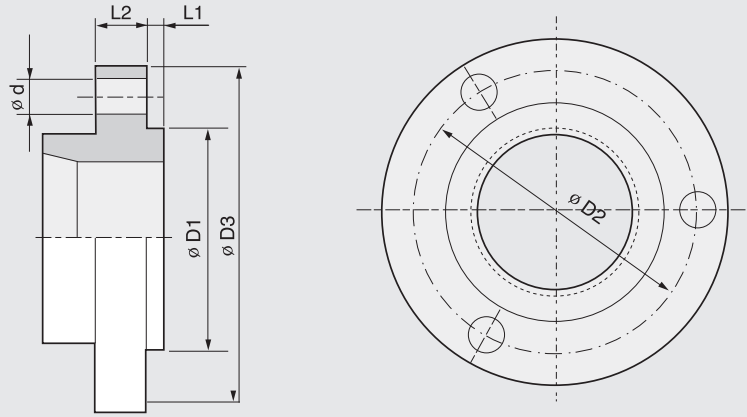
| | L1 | L2 | L3 | L4 | L5 | L6 | L7 | B1 | B2 | B3 | B4 | B5 | B6 | K1 | R | D1 |
|-------------|-----|----|----|------|------|----|----|----|------|------|-------|----|----|-------|----|----|
| SC-165(6") | 65 | 20 | 22 | 46.5 | 42 | 27 | 22 | 19 | 9.2 | 8.2 | 8.13 | 10 | 10 | 25.07 | 20 | 2 |
| SC-190(7") | 75 | 23 | 25 | 55.5 | 50.5 | 30 | 25 | 22 | 11.2 | 9.7 | 9.74 | 12 | 12 | 30.06 | 25 | 2 |
| SC-230(9") | 85 | 26 | 28 | 64.5 | 59.5 | 33 | 28 | 24 | 13.2 | 11.2 | 11.38 | 14 | 14 | 35.04 | 30 | 3 |
| SC-273(10") | 98 | 30 | 33 | 69.5 | 64 | 38 | 33 | 28 | 15 | 11.2 | 11.38 | 15 | 15 | 40.02 | 37 | 3 |
| SC-310(12") | 110 | 35 | 35 | 82.5 | 76 | 43 | 35 | 30 | 15 | 13.4 | 16.12 | 16 | 16 | 45.08 | 43 | 4 |
| SC-355(14") | 133 | 44 | 42 | 101 | 94.5 | 53 | 42 | 35 | 19 | 14 | 16.2 | 21 | 22 | 62.98 | 43 | 4 |

IC JAWS



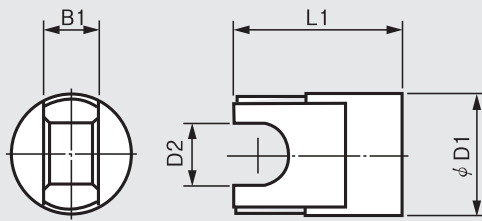
| | L1 | L2 | L3 | L4 | L5 | L6 | L7 | B1 | B2 | B3 | K1 | Threads/ inch |
|-------------|-----|------|------|-------|------|------|----|------|------|------|----|------------------|
| IC-150(6") | 55 | 31 | 14 | 47 | 10 | 10 | 25 | 14.5 | 8.2 | 6 | 25 | 6/inch |
| IC-200(8") | 75 | 44 | 21 | 55.5 | 12 | 12 | 30 | 16 | 10.3 | 10 | 30 | 5/inch |
| IC-250(10") | 90 | 54 | 26 | 61.5 | 14 | 14 | 30 | 16 | 10.3 | 10 | 35 | 5/inch |
| IC-300(12") | 100 | 60 | 28 | 70.5 | 16 | 16 | 35 | 19 | 11.5 | 13.6 | 40 | 4/inch |
| IC-350(14") | 110 | 67 | 31 | 75.5 | 18 | 18 | 35 | 19 | 11.5 | 14.6 | 45 | 4/inch |
| IC-400(16") | 120 | 73.5 | 33.5 | 84 | 20 | 20 | 40 | 22.5 | 11.5 | 15 | 50 | 4/inch |
| IC-450(18") | 130 | 80 | 37 | 89 | 22 | 22 | 40 | 22.5 | 11.5 | 15 | 55 | 4/inch |
| IC-500(20") | 140 | 85 | 40 | 106 | 24 | 24 | 45 | 27.5 | 16.4 | 16 | 60 | 3.5/inch |
| IC-600(24") | 160 | 99 | 46 | 116.4 | 28.2 | 28.2 | 50 | 31 | 16.4 | 18 | 70 | 3.5/inch |
| IC-700(28") | 160 | 100 | 47 | 111 | 28 | 29 | 50 | 30 | 15.3 | 20 | 70 | 4/inch |
| IC-800(32") | 200 | 120 | 55 | 138 | 30 | 30 | 60 | 40 | 20 | 34 | 89 | 6.0mm |

CHUCK ADAPTORS



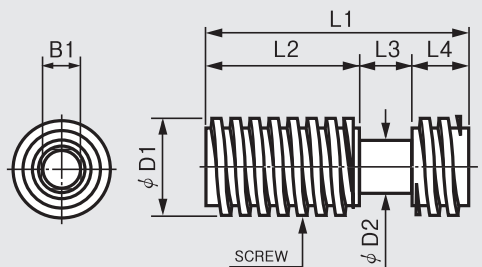
| | phi D1 | | phi D2 | | phi D3 | L1 | L2 | phi d |
|--------|-------------|---------------|-------------|-----------|--------|-----|----|-------|
| | base length | tolerance | base length | tolerance | | | | |
| SC-85 | 60 | +0.021 +0.002 | 73 | ±0.2 | 88 | 3 | 10 | 6.6 |
| SC-110 | 80 | +0.021 +0.002 | 95 | ±0.2 | 115 | 4 | 12 | 9 |
| SC-130 | 100 | +0.025 +0.003 | 115 | ±0.2 | 135 | 4 | 12 | 11 |
| SC-165 | 130 | +0.028 +0.003 | 147 | ±0.2 | 170 | 4.5 | 15 | 11 |
| SC-190 | 155 | +0.028 +0.003 | 172 | ±0.2 | 195 | 4.5 | 18 | 13 |
| SC-230 | 190 | +0.033 +0.004 | 210 | ±0.2 | 235 | 5.5 | 20 | 13 |
| SC-273 | 230 | +0.033 +0.004 | 250 | ±0.2 | 275 | 5.5 | 20 | 13 |
| SC-310 | 260 | +0.036 +0.004 | 285 | ±0.3 | 310 | 6.5 | 22 | 13 |
| SC-355 | 300 | +0.036 +0.004 | 328 | ±0.3 | 355 | 6.5 | 26 | 13 |

IC STOPPER



| | L1 | phi D1 | phi D2 | B1 |
|-------------|------|--------|--------|----|
| IC-150(6") | 31.5 | 22 | 11.5 | 10 |
| IC-200(8") | 42 | 26 | 14.5 | 14 |
| IC-250(10") | 45 | 26 | 14.5 | 14 |
| IC-300(12") | 51 | 30 | 16.5 | 16 |
| IC-350(14") | 49 | 30 | 16.5 | 16 |
| IC-400(16") | 55 | 34 | 18.5 | 18 |
| IC-450(18") | 60 | 34 | 18.5 | 18 |
| IC-500(20") | 53 | 35 | 19.5 | 20 |
| IC-600(24") | 59 | 38 | 20.5 | 20 |
| IC-700(28") | 57.5 | 38 | 23 | 18 |
| IC-800(32") | 59 | 44 | 27.5 | 24 |

IC SCREW BAR

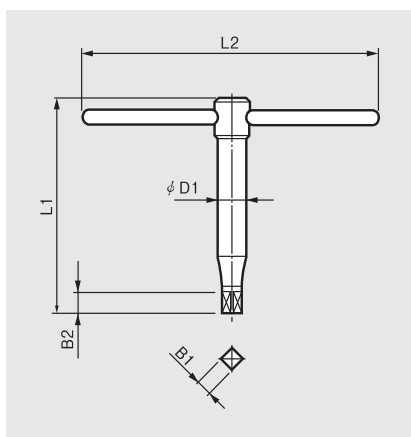


| | L1 | L2 | L3 | L4 | phi D1 | phi D2 | B1 | Threads/inch |
|-------------|------|-------|----|------|--------|--------|----|--------------|
| IC-150(6") | 51.5 | 21 | 10 | 20.5 | 22 | 11 | 8 | 6 / inch |
| IC-200(8") | 70 | 41 | 14 | 15 | 26 | 14 | 10 | 5 / inch |
| IC-250(10") | 91.5 | 58 | 14 | 19.5 | 26 | 14 | 10 | 5 / inch |
| IC-300(12") | 111 | 73 | 16 | 22 | 30 | 16 | 12 | 4 / inch |
| IC-350(14") | 130 | 85.5 | 16 | 28.5 | 30 | 16 | 12 | 4 / inch |
| IC-400(16") | 149 | 108.5 | 18 | 22.5 | 34 | 18 | 14 | 4 / inch |
| IC-450(18") | 169 | 123.5 | 18 | 27.5 | 34 | 18 | 14 | 4 / inch |
| IC-500(20") | 189 | 137 | 20 | 32 | 35 | 19 | 14 | 3.5 / inch |
| IC-600(24") | 233 | 162 | 20 | 51 | 38 | 20 | 14 | 3.5 / inch |
| IC-700(28") | 299 | 193 | 18 | 68 | 38 | 22 | 14 | 4 / inch |
| IC-800(32") | 330 | 216 | 24 | 90 | 44 | 28 | 19 | 6.0 mm |

Replacement Accessories

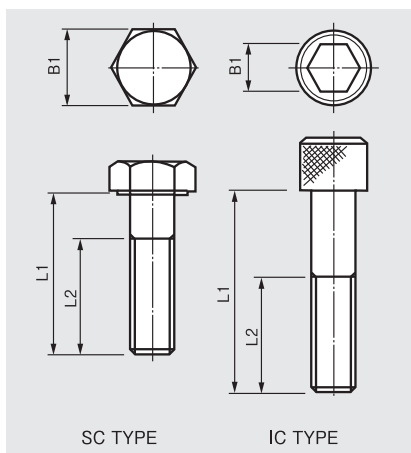
Manual Chuck

SC / FTC / IC HANDLES



| | L1 | L2 | B1 | B2 | φD1 | | L1 | L2 | B1 | B2 | φD1 |
|--------------|-----|-----|---------------------|----|-----|-------------|-----|-----|----|----|-----|
| SC-85(3") | 65 | 110 | 7 | 10 | 15 | IC-150(6") | 100 | 150 | 8 | 12 | 13 |
| SC-110(4") | 70 | 140 | 8 | 11 | 17 | IC-200(8") | 130 | 200 | 10 | 14 | 15 |
| SC-130(5") | 75 | 170 | 8 | 11 | 20 | IC-250(10") | 150 | 250 | 10 | 14 | 18 |
| SC-165(6") | 120 | 210 | 10 | 13 | 20 | IC-300(12") | 170 | 300 | 12 | 17 | 19 |
| SC-190(7") | 160 | 240 | 11 | 14 | 20 | IC-350(14") | 170 | 350 | 12 | 17 | 19 |
| SC-230(9") | 160 | 290 | 12 | 15 | 22 | IC-400(16") | 220 | 400 | 14 | 19 | 22 |
| SC-273(10") | 160 | 330 | 12 | 15 | 22 | IC-450(18") | 220 | 400 | 14 | 19 | 22 |
| SC-310(12") | 200 | 390 | 14 | 18 | 26 | IC-500(20") | 220 | 450 | 14 | 20 | 22 |
| SC-355(14") | 200 | 390 | 14 | 18 | 26 | IC-600(24") | 230 | 500 | 14 | 20 | 25 |
| FTC-450(19") | 205 | 500 | 17 | 20 | 25 | IC-700(28") | 300 | 500 | 14 | 20 | 28 |
| FTC-535(21") | 230 | 500 | 6 $\frac{1}{2}$ -22 | 26 | 30 | IC-800(32") | 300 | 500 | 19 | 20 | 35 |
| FTC-610(24") | 230 | 500 | 6 $\frac{1}{2}$ -22 | 26 | 30 | | | | | | |

SC / FTC / IC MOUNTING BOLTS



| | Bolt size | QTR | L1 | L2 | φB1 | | Bolt size | QTR | L1 | L2 | φB1 |
|--------------|-----------|-----|-----|----|-----|-------------|-----------|-----|-----|----|-----|
| SC-85(3") | M6×P1.0 | 3 | 22 | 18 | 10 | IC-150(6") | M10×P1.5 | 4 | 65 | 30 | 8 |
| SC-110(4") | M8×P1.25 | 3 | 25 | 20 | 13 | IC-200(8") | M12×P1.75 | 4 | 60 | 35 | 10 |
| SC-130(5") | M8×P1.25 | 3 | 25 | 20 | 13 | IC-250(10") | M12×P1.75 | 4 | 85 | 40 | 10 |
| SC-165(6") | M10×P1.5 | 3 | 32 | 26 | 17 | IC-300(12") | M12×P1.75 | 4 | 100 | 55 | 10 |
| SC-190(7") | M10×P1.5 | 3 | 36 | 26 | 17 | IC-350(14") | M12×P1.75 | 4 | 100 | 55 | 10 |
| SC-230(9") | M12×P1.75 | 3 | 40 | 30 | 19 | IC-400(16") | M16×P2.0 | 4 | 110 | 60 | 14 |
| SC-273(10") | M12×P1.75 | 3 | 40 | 30 | 19 | IC-450(18") | M16×P2.0 | 4 | 110 | 60 | 14 |
| SC-310(12") | M12×P1.75 | 3 | 45 | 30 | 19 | IC-500(20") | M16×P2.0 | 4 | 120 | 60 | 14 |
| SC-355(14") | M12×P1.75 | 6 | 50 | 30 | 19 | IC-600(24") | M20×P2.5 | 4 | 135 | 70 | 17 |
| FTC-450(19") | M16×P1.25 | 6 | 125 | 38 | 24 | IC-700(28") | M20×P2.5 | 8 | 120 | 54 | 17 |
| FTC-535(21") | M20×P1.40 | 6 | 140 | 52 | 30 | IC-800(32") | M20×P2.5 | 8 | 130 | 54 | 17 |
| FTC-610(24") | M20×P1.40 | 6 | 140 | 52 | 30 | | | | | | |