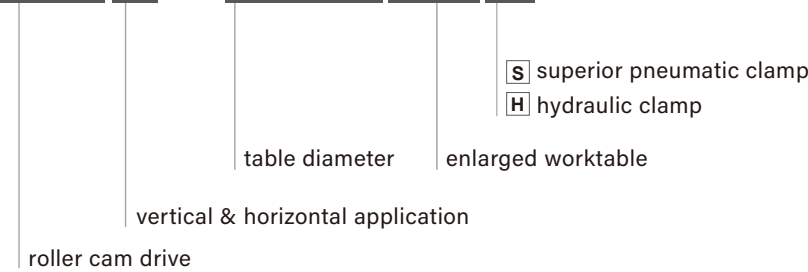


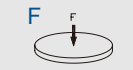
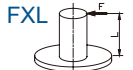
Roller Gear Cam Drive  
Rotary Table

R C X - 2 5 0 (E) S



- Worktable diameter Ø170, Ø210, Ø255.
- Rolling contact reserves high rigidity, high speed and long endurance.
- Least drive energy wear-out and more than 80% transmission rate.
- Backlash-free from rolling motion achieves high accuracy.

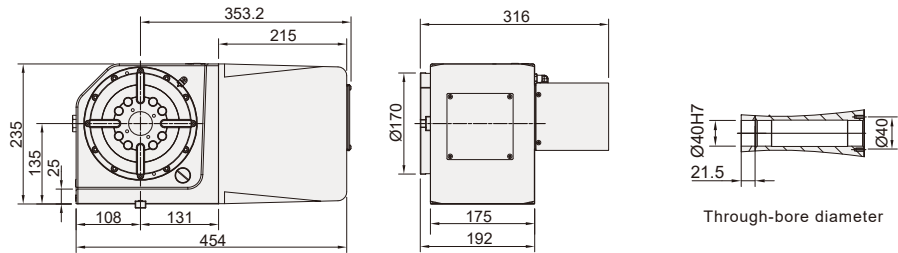
SPECIFICATIONS

| MODEL                                                | Unit                                                                                | RCX-170S/H                         | RCX-210S/H                         | RCX-250ES/H                        |
|------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| Worktable diameter                                   | mm / inch                                                                           | Ø170 / Ø6.69                       | Ø210 / Ø8.27                       | Ø255 / Ø10.04                      |
| Center bore diameter                                 | mm / inch                                                                           | Ø40H7 / Ø1.57H7                    | Ø40H7 / Ø1.57H7                    | Ø40H7 / Ø1.57H7                    |
| Through-bore diameter                                | mm / inch                                                                           | Ø40 / Ø1.57                        | Ø40 / Ø1.57                        | Ø40 / Ø1.57                        |
| Height of table (horizontal)                         | mm / inch                                                                           | 192 / 7.6                          | 192 / 7.6                          | 207 / 8.15                         |
| Height of center (vertical)                          | mm / inch                                                                           | 135 / 5.31                         | 160 / 6.30                         | 160 / 6.30                         |
| Width of T-slot                                      | mm / inch                                                                           | 12H7 / 0.47H7                      | 12H7 / 0.47H7                      | 12H7 / 0.47H7                      |
| Width of guide block                                 | mm / inch                                                                           | 18 / 0.71                          | 18 / 0.71                          | 18 / 0.71                          |
| Clamping method /pressure                            | MPa / psi                                                                           | P:0.55~0.7/79.8~101.5<br>H:2.5/363 | P:0.55~0.7/79.8~101.5<br>H:2.5/363 | P:0.55~0.7/79.8~101.5<br>H:2.5/363 |
| Clamping torque                                      | N.m / ft. lbs.                                                                      | 300 / 221<br>450 / 332             | 400 / 295<br>600 / 443             | 400 / 295<br>600 / 443             |
| Servo motor spec                                     |                                                                                     | refer to page 77                   |                                    |                                    |
| Transmission ratio                                   |                                                                                     | 1 / 20                             | 1 / 24                             | 1 / 24                             |
| Max. table speed /<br>at specified servo motor speed | min <sup>-1</sup>                                                                   | 83.3 /<br>2000                     | 83.3 /<br>2000                     | 83.3 /<br>2000                     |
| Standard loading inertia ( $\frac{W.D^2}{8}$ )       | Kg.m <sup>2</sup>                                                                   | 0.72                               | 0.72                               | 0.72                               |
| Resolution                                           | deg.                                                                                | 0.001                              | 0.001                              | 0.001                              |
| Indexing accuracy                                    | sec.                                                                                | 20                                 | 20                                 | 20                                 |
| Repeatability                                        | sec.                                                                                | 6                                  | 6                                  | 6                                  |
| Net weight<br>(servo motor excluded)                 | kg / lb                                                                             | 55 / 121                           | 70 / 154                           | 78 / 172                           |
| Allowable<br>loading<br>capacity                     | Vertical                                                                            | kg / lb                            | 100 / 220                          | 100 / 220                          |
|                                                      | Horizontal                                                                          | kg / lb                            | 200 / 441                          | 200 / 441                          |
|                                                      | Tailstock applied                                                                   | kg / lb                            | 200 / 441                          | 200 / 441                          |
|                                                      |  | N / lbs                            | 14000 / 3147                       | 14000 / 3147                       |
| FxL<br>When table<br>clamped                         |  | N.m / ft. lbs.                     | 1020 / 752                         | 1020 / 752                         |
|                                                      |  | N.m / ft. lbs.                     | 300 / 221<br>450 / 332             | 400 / 295<br>600 / 443             |
| Cam allowable torque                                 | N.m / ft. lbs.                                                                      | 206 / 152                          | 280 / 207                          | 280 / 207                          |
| Allowable Max. rotary joint quantity                 | Port                                                                                | 4                                  | 4                                  | 4                                  |

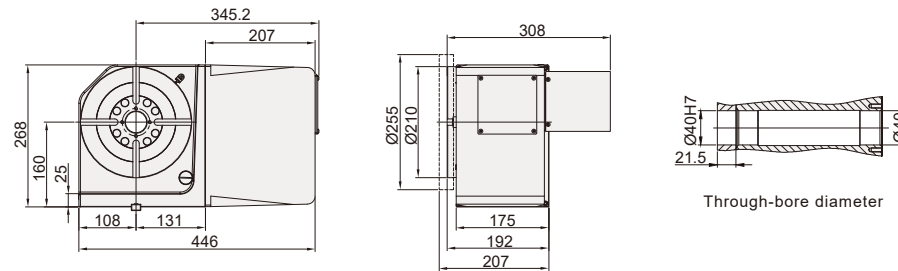
DIMENSIONAL DRAWINGS

Unit : mm

RCX-170S/H



RCX-210S/H



RCX-250ES/H

