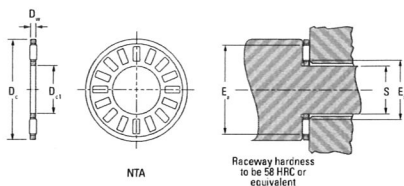


THRUST NEEDLE ROLLER AND CAGE ASSEMBLIES, THRUST WASHERS

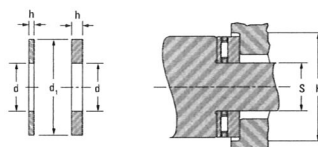
INCH SERIES

- Dimensions for bore and O.D. of thrust assemblies and washers are nominal.
- See page B-6-36 for details on piloting and backup surfaces.
- Thrust washers burnished at least one-quarter of bore area (remainder is rough breakaway finish).
- O.D. finish of washers will be as blanked.



| Shaft Dia.<br>in | Assembly Dimensions |                |                |                |                |                | Assembly Designation | Load Ratings |                 | Fatigue Load Limit<br>C <sub>10</sub> | Speed Rating <sup>1</sup><br>min <sup>-1</sup> |
|------------------|---------------------|----------------|----------------|----------------|----------------|----------------|----------------------|--------------|-----------------|---------------------------------------|------------------------------------------------|
|                  | B <sub>1</sub>      | B <sub>2</sub> | B <sub>3</sub> | B <sub>4</sub> | B <sub>5</sub> | B <sub>6</sub> |                      | C            | C <sub>10</sub> |                                       |                                                |
|                  | mm                  | in             | mm             | in             | mm             | in             |                      | lbf          | kg              |                                       |                                                |
| 2                | 50.80               | 2.000          | 60.80          | 2.393          | 1.904          | 0.0761         | NTA-3244             | 24.02        | 132.56          | 13.5                                  | 6100                                           |
| 2 1/4            | 53.98               | 2.125          | 73.025         | 2.875          | 1.904          | 0.0761         | NTA-3448             | 24.42        | 137.45          | 14.0                                  | 5800                                           |
| 2 1/2            | 57.15               | 2.250          | 76.20          | 3.000          | 1.904          | 0.0761         | NTA-3648             | 24.78        | 142.34          | 14.5                                  | 5600                                           |
| 2 3/4            | 60.33               | 2.375          | 79.375         | 3.125          | 1.904          | 0.0761         | NTA-3852             | 25.14        | 147.23          | 15.0                                  | 5400                                           |

<sup>1</sup> Speed ratings listed are based on adequate lubrication. See page B-6-37 for lubrication information. Suggestions for an application requiring O.D. piloting should be determined in consultation with your representative.



| Approx. Wt.<br>kg/lbs | Thrust Washer Designation | Washer Dimensions |                |                |                |                |                | Piloting Dimensions |                | Dia. To Clear O.D. | Washer Wt.<br>kg/lbs | Shaft Dia.<br>in |
|-----------------------|---------------------------|-------------------|----------------|----------------|----------------|----------------|----------------|---------------------|----------------|--------------------|----------------------|------------------|
|                       |                           | d                 | d <sub>1</sub> | d <sub>2</sub> | d <sub>3</sub> | d <sub>4</sub> | d <sub>5</sub> | S                   | S <sub>1</sub> |                    |                      |                  |
|                       |                           | mm                | in             | mm             | in             | mm             | in             | mm                  | in             |                    |                      |                  |
| 0.015                 | TRC-2842                  | 44.45             | 1.750          | 63.50          | 2.500          | 2.41           | 0.095          | 2.34                | 0.093          | 44.45              | 0.829                | 0.003            |
| 0.015                 | TRD-2842                  | 44.45             | 1.750          | 63.50          | 2.500          | 3.20           | 0.126          | 3.12                | 0.123          | 44.45              | 0.829                | 0.004            |
| 0.015                 | TRF-2842                  | 44.45             | 1.750          | 63.50          | 2.500          | 4.78           | 0.188          | 4.70                | 0.185          | 44.45              | 0.829                | 0.007            |
| 0.015                 | TRA-3244                  | 50.80             | 2.000          | 68.80          | 2.700          | 0.81           | 0.032          | 0.76                | 0.030          | 50.80              | 1.111                | 0.011            |
| 0.015                 | TRB-3244                  | 50.80             | 2.000          | 68.80          | 2.700          | 1.60           | 0.063          | 1.52                | 0.060          | 50.80              | 1.111                | 0.022            |
| 0.015                 | TRC-3244                  | 50.80             | 2.000          | 68.80          | 2.700          | 2.41           | 0.095          | 2.34                | 0.093          | 50.80              | 1.111                | 0.024            |
| 0.015                 | TRD-3244                  | 50.80             | 2.000          | 68.80          | 2.700          | 3.20           | 0.126          | 3.12                | 0.123          | 50.80              | 1.111                | 0.044            |
| 0.015                 | TRF-3244                  | 50.80             | 2.000          | 68.80          | 2.700          | 4.78           | 0.188          | 4.70                | 0.185          | 50.80              | 1.111                | 0.066            |
| 0.015                 | TRA-3448                  | 53.98             | 2.125          | 73.03          | 2.875          | 0.81           | 0.032          | 0.76                | 0.030          | 53.98              | 1.211                | 0.012            |
| 0.015                 | TRB-3448                  | 53.98             | 2.125          | 73.03          | 2.875          | 1.60           | 0.063          | 1.52                | 0.060          | 53.98              | 1.211                | 0.024            |
| 0.015                 | TRC-3448                  | 53.98             | 2.125          | 73.03          | 2.875          | 2.41           | 0.095          | 2.34                | 0.093          | 53.98              | 1.211                | 0.026            |
| 0.015                 | TRD-3448                  | 53.98             | 2.125          | 73.03          | 2.875          | 3.20           | 0.126          | 3.12                | 0.123          | 53.98              | 1.211                | 0.047            |
| 0.017                 | TRA-3648                  | 57.15             | 2.250          | 76.20          | 3.000          | 0.81           | 0.032          | 0.76                | 0.030          | 57.15              | 1.259                | 0.012            |
| 0.017                 | TRB-3648                  | 57.15             | 2.250          | 76.20          | 3.000          | 1.60           | 0.063          | 1.52                | 0.060          | 57.15              | 1.259                | 0.022            |
| 0.017                 | TRC-3648                  | 57.15             | 2.250          | 76.20          | 3.000          | 2.41           | 0.095          | 2.34                | 0.093          | 57.15              | 1.259                | 0.027            |
| 0.017                 | TRD-3648                  | 57.15             | 2.250          | 76.20          | 3.000          | 3.20           | 0.126          | 3.12                | 0.123          | 57.15              | 1.259                | 0.048            |
| 0.017                 | TRF-3648                  | 57.15             | 2.250          | 76.20          | 3.000          | 4.78           | 0.188          | 4.70                | 0.185          | 57.15              | 1.259                | 0.071            |
| 0.029                 | TRC-3852                  | 57.15             | 2.250          | 79.38          | 3.125          | 2.41           | 0.095          | 2.34                | 0.093          | 57.15              | 1.259                | 0.043            |
| 0.019                 | TRA-4052                  | 63.50             | 2.500          | 82.55          | 3.250          | 0.81           | 0.032          | 0.76                | 0.030          | 63.50              | 1.411                | 0.013            |
| 0.019                 | TRB-4052                  | 63.50             | 2.500          | 82.55          | 3.250          | 1.60           | 0.063          | 1.52                | 0.060          | 63.50              | 1.411                | 0.027            |

<sup>1</sup> If the shaft and the housing adjacent to the bearing O.D. are not concentric, the TIR between the shaft and housing should be added to this dimension.

Continued on next page.