

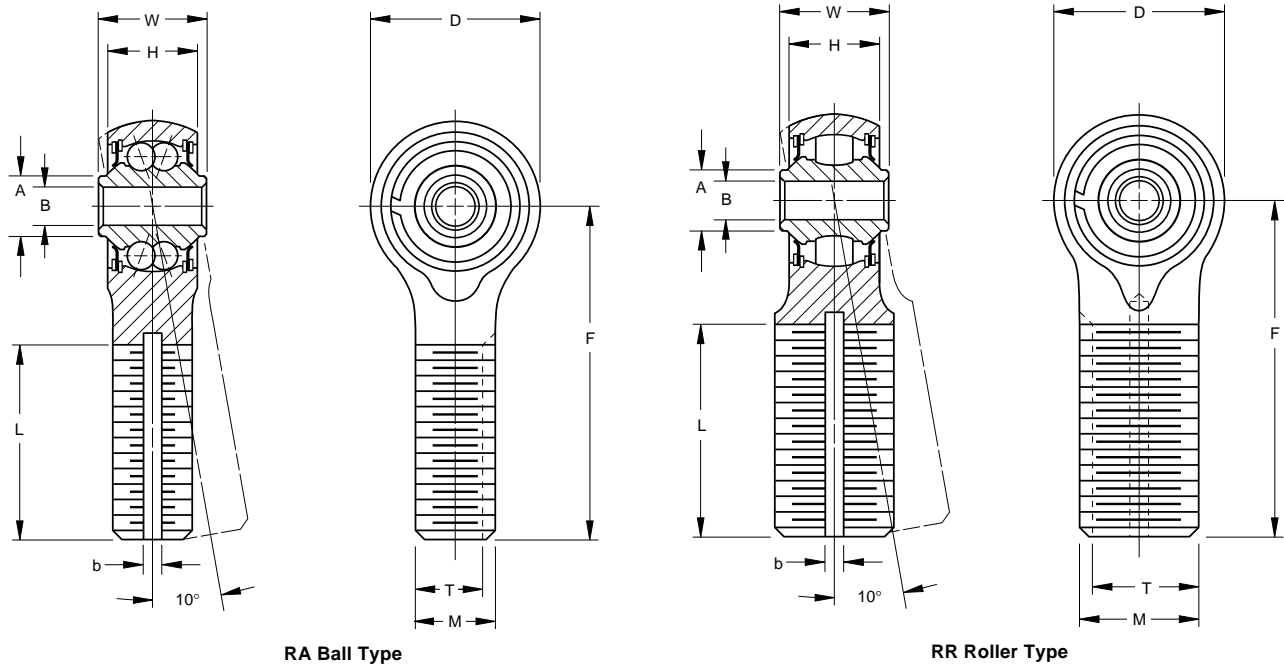
BALL BEARING ROD ENDS — RA/RR SERIES EXTERNAL THREAD



NAS-659

- NAS-659 series⁽¹⁾
- Self-aligning
- 3-way balanced design brings shank strength, bolt strength and bearing capacity all in balance
- “Pressurized” shanks are designed to withstand column action under compression with angularity as high as 9°
- Exposed surfaces except bore, cap, and seals are cadmium plated

- Keyway in shank is designed in accordance with NAS-513 standards for use with NAS-509 drilled jam nuts and either NAS-513 rod end locking washers or NAS-559 rod end key type locks
- Permissible misalignment is 10° in either direction (total 20°)
- Ultimate shank tensile strength is 125,000 to 180,000 psi
- Equipped with molded rubber seals when specified



RA Ball Type

RR Roller Type

SPECIFICATIONS AND ORDERING INFORMATION

TO ORDER, SPECIFY BEARING NUMBER AND FACTORY SPECIFICATION. SEE TABLE 1 ON PG 8. (Example RA3M5 FS464)

| Bearing ⁽¹⁾ Number | NAS 659 Dash No. | Bore B | | Outside Diameter D | | Widths W H | | A | F | L ⁽²⁾ | | b ⁽³⁾ | T ⁽³⁾ | M UNJF-3A Threads Per AS879 | Wt. Approx. | Radial Limit Load Rating | | | | | | | | |
|----------------------------------|---------------------------|-----------|-------|--------------------------|-------|---------------|-------|-------|-------|------------------|-------|------------------|------------------|---|--------------------|-----------------------------------|------|-------|-------|---------|------|-------|------|-------|
| | | in. | mm | in. | mm | in. | mm | | | in. | mm | | | | | in. | mm | lbs. | kg | lbf. | N | | | |
| RA3M5 | -3-5 | 0.1900 | 4.826 | 0.781 | 19.84 | 0.562 | 14.27 | 0.438 | 11.13 | 0.312 | 7.92 | 1.938 | 49.23 | 1.375 | 34.92 | 0.062 | 1.57 | 0.26 | 6.6 | 5/16-24 | 0.07 | 0.032 | 1000 | 4400 |
| RA3M5-2 ⁽⁵⁾ | — | 0.1900 | 4.826 | 0.781 | 19.84 | 0.500 | 12.70 | 0.438 | 11.13 | 0.312 | 7.92 | 1.938 | 49.23 | 1.375 | 34.92 | 0.062 | 1.57 | 0.26 | 6.6 | 5/16-24 | 0.07 | 0.032 | 1000 | 4400 |
| RA4M7 | -4-7 | 0.2500 | 6.350 | 0.938 | 23.83 | 0.687 | 17.45 | 0.531 | 13.49 | 0.365 | 9.27 | 2.250 | 57.15 | 1.625 | 41.28 | 0.093 | 2.36 | 0.37 | 9.4 | 7/16-20 | 0.13 | 0.059 | 1720 | 7650 |
| RR4M9 | R4-9 | 0.2500 | 6.350 | 1.063 | 27.00 | 0.625 | 15.88 | 0.469 | 11.91 | 0.404 | 10.26 | 2.563 | 65.10 | 1.875 | 47.62 | 0.125 | 3.18 | 0.478 | 12.14 | 9/16-18 | 0.21 | 0.095 | 3025 | 13400 |
| RR5M12 | R5-12 | 0.3125 | 7.938 | 1.438 | 36.53 | 0.812 | 20.62 | 0.656 | 16.66 | 0.515 | 13.08 | 3.125 | 79.38 | 2.219 | 56.36 | 0.125 | 3.18 | 0.663 | 16.84 | 3/4-16 | 0.47 | 0.213 | 7350 | 32500 |
| RR6M14 | R6-14 | 0.3750 | 9.525 | 1.750 | 44.45 | 0.937 | 23.80 | 0.750 | 19.05 | 0.564 | 14.33 | 3.563 | 90.50 | 2.438 | 61.93 | 0.156 | 3.96 | 0.777 | 19.74 | 7/8-14 | 0.72 | 0.327 | 9600 | 42500 |

⁽¹⁾ When ordering as NAS part, add suffix “FS237” to part number. (Example RA4M7 FS237)

⁽²⁾ Threads: UNJF-3A (based on length of engagement = 1.25 thd. diam. + 5/8).

⁽³⁾ Slots conform to NAS 513 standards.

⁽⁴⁾ Thrust rating is 20% of radial load rating.

⁽⁵⁾ This size not covered by NAS 659. Lightening holes in shank RR5M12-1/4 in. x 2 5/16 in.

RR6M14-3/8 in. x 2 9/16 in.

Add letter “L” to part number for left hand threads. Example: RA3ML5.