

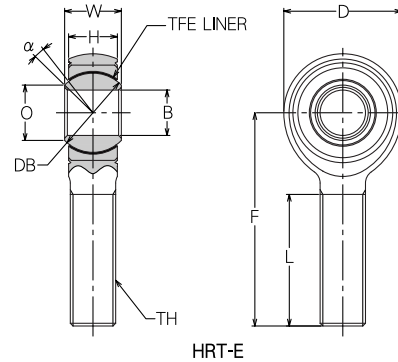
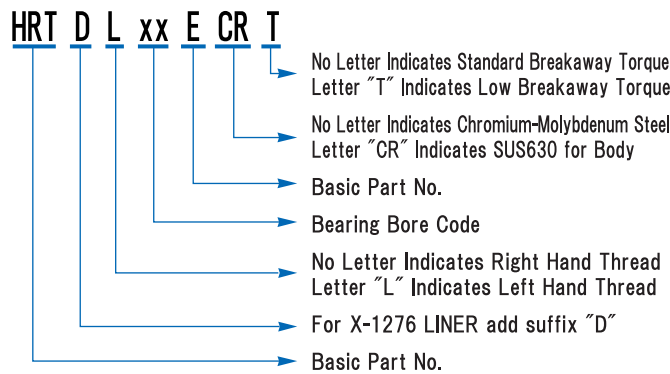
# HRT-E

**MALE ROD ENDS**      **SELF-LUBRICATING**      **3 PIECE**

**Materials**

|              | HRT-E                                    | HRT-ECR                              |
|--------------|--|--------------------------------------|
| <b>BODY</b>  | Chromium-Molybdenum Steel<br>Zinc Plated | SUS630 Stainless Steel<br>Passivated |
| <b>RACE</b>  | 410 Stainless Steel / Heat Treated       | 410 Stainless Steel / Heat Treated   |
| <b>BALL</b>  | 440C Stainless Steel / Heat Treated      | 440C Stainless Steel / Heat Treated  |
| <b>LINER</b> | Teflon / Fabric                          | Teflon / Fabric                      |

**Description of Types**



Dimensions in mm

| MINEBEA Part No. | φB H7 | φD ± 0.50 | W <sub>0</sub> - 0.13 | H ± 0.13 | F ± 0.5   | TH JIS Class 2 | L ± 0.7 | α (deg) | φ O Ref. | S φ DB Ref. | No Load Rotational Breakaway Torque N · m | Static Limit Load kN(3) |           | Radial Static Ultimate Load (3) kN | Fatigue Load (3) kN | Approx. Weight g |
|------------------|-------|-----------|-----------------------|----------|-----------|----------------|---------|---------|----------|-------------|---|-------------------------|-----------|------------------------------------|---------------------|------------------|
|                  |       |           |                       |          |           |                |         |         |          |             | Standard                                  | Radial                  | Axial (2) |                                    |                     |                  |
| HRT3E            | 3     | 16.0      | 7.0                   | 5.25     | 30.0      | M3 × 0.5       | 10.0    | 18      | 5.2      | 8.73        | 0.06 ~ 0.68<br>{0.6 ~ 6.9kgf · cm}        | 3.62                    | 1.96      | 4.51                               | 0.73                | 25               |
| HRT4E            | 4     | 18.0      | 9.5                   | 7.75     | 35.0      | M4 × 0.7       | 16.0    | 16      | 5.8      | 11.11       |   | 6.27                    | 3.53      | 7.84                               | 1.27                | 30               |
| HRT5E            | 5     | 20.5      | 11.0                  | 8.75     | 39.5      | M5 × 0.8       | 22.0    | 15      | 7.8      | 13.49       | 0.12 ~ 1.13<br>{1.2 ~ 11.5kgf · cm}       | 10.29                   | 5.09      | 12.84                              | 2.10                | 35               |
| HRT6E            | 6     |           |                       |          |           | M6 × 1.0       |         |         |          |             |   | 14.51                   |           | 18.14                              | 2.99                |                  |
| HRT8E            | 8     | 23.0      | 8.25                  | 46.0     | M8 × 1.25 | 29.0           | 14      | 10.9    | 15.48    | 26.77       |   | 5.29                    | 33.44     | 5.54                               | 40                  |                  |
| HRT10E           | 10    | 26.0      | 10.75                 | 47.0     | M10 × 1.5 |                |         |         |          | 8           |   | 12.2                    | 17.46     | 37.65                              | 6.76                | 47.07            |
| HRT12E           | 12    | 34.0      | 16.0                  | 13.25    | 62.0      | M12 × 1.75     | 37.0    | 10      | 15.4     | 22.22       | 100.71                                    | 9.70                    | 125.81    | 20.98                              | 195                 |                  |
| HRT14E           | 14    | 36.0      | 17.0                  | 14.25    | 64.0      | M14 × 2.0      | 38.0    | 8       | 18.9     | 25.40       |   |                         |           |                                    |                     | 82.96            |
| HRT15E           | 15    | 38.0      | 18.0                  | 15.25    | 65.0      |                |         |         |          |             | M16 × 2.0                                 | 39.5                    | 10        | 19.2                               | 26.99               | 101.40           |
| HRT16E           | 16    | 39.0      | 19.0                  |          | 72.5      | M16 × 1.5      | 42.0    | 12      | 20.4     | 28.58       |   |                         |           |                                    |                     | 120.62           |
| HRT17E           | 17    | 41.0      | 20.0                  | 16.30    | 79.5      | M18 × 1.5      | 46.0    | 10      |          |             | 22.9                                      | 31.75                   | 121.30    | 12.84                              | 151.61              | 25.20            |
| HRT18E           | 18    | 43.0      |                       |          | 83.0      | M20 × 1.5      | 50.0    | 13      | 22.9     | 31.75       |   |                         | 156.21    | 15.10                              | 195.25              | 32.55            |
| HRT20E           | 20    | 45.0      | 22.0                  | 19.30    | 86.0      | M22 × 1.5      | 51.0    | 6       | 27.1     | 34.92       | 0.23 ~ 1.80<br>{2.3 ~ 18.4kgf · cm}       | 300.08                  | 20.88     | 375.10                             | 62.56               | 1150             |
| HRT22E           | 22    | 52.0      |                       |          | 105.0     | M24 × 2.0      | 59.0    | 15      | 32.3     | 47.62       |   | 283.70                  | 23.24     | 354.60                             | 59.13               | 1500             |
| HRT25E           | 25    | 70.0      | 35.0                  | 25.30    | 110.0     | M27 × 2.0      | 62.0    | 14      | 36.8     | 50.80       |   | 271.93                  | 24.81     | 339.89                             | 56.68               | 1800             |
| HRT28E           | 28    | 75.0      |                       |          | 120.0     | M30 × 2.0      | 65.0    |         |          |             |   | 40.4                    | 54.77     |                                    |                     |                  |
| HRT30E           | 30    | 78.0      | 37.0                  | 26.30    | 120.0     | M30 × 2.0      | 65.0    | 14      | 40.4     | 54.77       |   |                         |           |                                    |                     |                  |

**Notes**

- Teflon liner permanently bonded to race I.D.
  - Axial load indicates either the smaller value of static load or proof load.
  - Special specification can bare higher fatigue load.
  - Made to order only.
  - No Load Rotational Breakaway Torque.  
Low Torque All Size: 0.02N · m MAX  
(Radial Clearance 0.05mm MAX)
- Please consult MINEBEA for availability of bearings in this series.

| Bore size         | ~ 3       | ~ 6       | ~ 10      | ~ 18      | ~ 30      |
|-------------------|-----------|-----------|-----------|-----------|-----------|
| H7 Tolerance (μm) | + 10<br>0 | + 12<br>0 | + 15<br>0 | + 18<br>0 | + 21<br>0 |