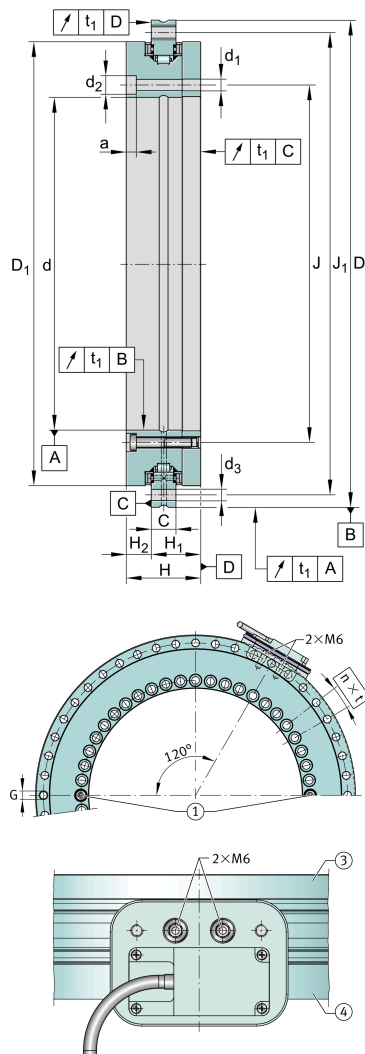


**YRTSMA460**

## Axial/radial roller bearing

Axial/radial bearings, double direction, screw mounting, for higher speeds, with integrated absolute angular measuring system

## Technical information



## Your current product variant

|                                     |    |  |
|-------------------------------------|----|--|
| Angular measuring system integrated | MA | with absolute angular measuring system |
|-------------------------------------|----|--|

## Main Dimensions &amp; Performance Data

|             |             |                                   |
|-------------|-------------|-----------------------------------|
| d           | 460 mm      | Bore diameter                     |
|             | 0 mm        | Bore diameter upper tolerance     |
|             | -0,023 mm   | Bore diameter lower tolerance     |
| D           | 600 mm      | Outside diameter                  |
|             | 0 mm        | Outside diameter upper tolerance  |
|             | -0,028 mm   | Outside diameter lower tolerance  |
| H           | 70 mm       | Height                            |
| $C_r$       | 168.000 N   | Basic dynamic load rating, radial |
| $C_{0r}$    | 570.000 N   | Basic static load rating, radial  |
| $C_a$       | 221.000 N   | Basic dynamic load rating, axial  |
| $C_{0a}$    | 1.690.000 N | Basic static load rating, axial   |
| $n_G$       | 560 1/min   | Limiting speed                    |
| $\approx m$ | 45 kg       | Weight                            |



### Mounting dimensions

|                |        |   |
|----------------|--------|---|
| J              | 482 mm | Pitch circle diameter fixing holes in inner ring  |
| J <sub>1</sub> | 580 mm | Pitch circle diameter fixing holes in outer ring  |
| d <sub>1</sub> | 9,3 mm | Fixing holes diameter inner ring  |
| d <sub>2</sub> | 15 mm  | Counterbore diameter of fixing holes  |
| a              | 8,2 mm | Counterbore depth of fixing holes   |
|                | 46     | Quantity of fixing holes inner ring   |
| d <sub>3</sub> | 9,3 mm | Fixing holes diameter outer ring  |
|                | 45     | Quantity of fixing holes outer ring   |
| n              | 48     | Pitch quantity  |
| t              | 7,5 °  | Pitch separation angle  |
| G              | M12    | Threaded extraction hole  |
|                | 3      | Quantity of threaded extraction hole  |
| M <sub>A</sub> | 34 Nm  | Screw tightening torque   |
|                | 2      | Quantity of retaining screws  |
| t <sub>1</sub> | 6 μm   | Axial and radial runout, measurement standard; Measured on mounted bearing, with ideal adjacent construction. |

### Dimensions

|                    |          |  |
|--------------------|----------|--|
| H <sub>1</sub>     | 46 mm    | Height contact face outer ring                   |
|                    | 0,07 mm  | Height contact face outerring H1 upper tolerance |
|                    | -0,08 mm | Height contact face outerring H1 lower tolerance |
| H <sub>2</sub>     | 24 mm    | Height contact face outer ring                   |
| D <sub>1 max</sub> | 560,9 mm | Maximum diameter inner ring                      |
| C                  | 22 mm    | Width of outer ring                              |

### Temperature range








|                  |        |                            |
|------------------|--------|----------------------------|
| T <sub>min</sub> | -30 °C | Operating temperature min. |
| T <sub>max</sub> | 120 °C | Operating temperature max. |



### Additional information

|          |                           |  |
|----------|---------------------------|--|
| $c_{aL}$ | 16.000 N/ $\mu$ m         | Axial rigidity of bearing position             |
| $c_{rL}$ | 7.200 N/ $\mu$ m          | Radial rigidity of bearing position            |
| $c_{kL}$ | 504.000 Nm/mrad           | Tilting rigidity of bearing position           |
| $c_{aW}$ | 25.400 N/ $\mu$ m         | Axial rigidity of rolling element set          |
| $c_{rW}$ | 9.500 N/ $\mu$ m          | Radial rigidity of rolling element set         |
| $c_{kW}$ | 843.000 Nm/mrad           | Tilting rigidity of rolling element set        |
| $M_m$    | 7.379 kg*cm <sup>2</sup>  | Mass moment of inertia for rotating outer ring |
| $M_m$    | 15.738 kg*cm <sup>2</sup> | Mass moment of inertia for rotating inner ring |

### Characteristics

-  Radial load
-  Axial load in one direction
-  Axial load in two directions
-  Moments about all axes
-  Grease Lubrication
-  Not sealed
-  Large bearing