

**YRTC100-XL**

## Axial/radial roller bearing

Axial/radial bearings, double direction, for screw mounting



X-life

## Technical information

**Main Dimensions & Performance Data**

d	100 mm	Bore diameter
	0 mm	Bore diameter upper tolerance
	-0,01 mm	Bore diameter lower tolerance
D	185 mm	Outside diameter
	0 mm	Outside diameter upper tolerance
	-0,015 mm	Outside diameter lower tolerance
H	38 mm	Height
$C_r$	49.500 N	Basic dynamic load rating, radial
$C_{0r}$	88.000 N	Basic static load rating, radial
$C_a$	105.000 N	Basic dynamic load rating, axial
$C_{0a}$	455.000 N	Basic static load rating, axial
$n_G$	1.200 1/min	Limiting speed
$M_R$	2,5 Nm	Bearing friction torque at 5 1/min
$\approx m$	3,571 kg	Weight



### Mounting dimensions

J	112 mm	Pitch circle diameter fixing holes in inner ring
J <sub>1</sub>	170 mm	Pitch circle diameter fixing holes in outer ring
d <sub>1</sub>	5,6 mm	Fixing holes diameter inner ring
d <sub>2</sub>	10 mm	Counterbore diameter of fixing holes
a	5,4 mm	Counterbore depth of fixing holes
	16	Quantity of fixing holes inner ring
d <sub>3</sub>	5,6 mm	Fixing holes diameter outer ring
	15	Quantity of fixing holes outer ring
n	18	Pitch quantity
t	20 °	Pitch separation angle
G	M5	Threaded extraction hole
	3	Quantity of threaded extraction hole
M <sub>A</sub>	8,5 Nm	Screw tightening torque
	2	Quantity of retaining screws
t <sub>1</sub>	3 μm	Axial and radial runout, measurement standard; Measured on mounted bearing, with ideal adjacent construction.

### Dimensions

H <sub>1</sub>	25 mm	Height contact face outer ring
	0,025 mm	Height contact face outerring H1 upper tolerance
	-0,025 mm	Height contact face outerring H1 lower tolerance
H <sub>2</sub>	13 mm	Height contact face outer ring
	0,02 mm	Height contact face outerring H2 upper tolerance
	-0,02 mm	Height contact face outerring H2 lower tolerance
D <sub>1 max</sub>	161 mm	Maximum diameter inner ring
C	12 mm	Width of outer ring









### Temperature range

$T_{\min}$	-30 °C	Operating temperature min.
$T_{\max}$	120 °C	Operating temperature max.

### Additional information

$c_{aL}$	5.300 N/ $\mu$ m	Axial rigidity of bearing position
$c_{rL}$	3.150 N/ $\mu$ m	Radial rigidity of bearing position
$c_{kL}$	12.200 Nm/mrad	Tilting rigidity of bearing position
$c_{aW}$	8.700 N/ $\mu$ m	Axial rigidity of rolling element set
$c_{rW}$	5.200 N/ $\mu$ m	Radial rigidity of rolling element set
$c_{kW}$	23.500 Nm/mrad	Tilting rigidity of rolling element set

### Characteristics

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