

**YRTC100-XL**

Axial/radial roller bearing

Axial/radial bearings, double direction, for screw mounting



X-life

Technical information



Your current product variant

Angular measuring system integrated	No	without measuring system
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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 ₁	170 mm	Pitch circle diameter fixing holes in outer ring
d ₁	5,6 mm	Fixing holes diameter inner ring
d ₂	10 mm	Counterbore diameter of fixing holes
a	5,4 mm	Counterbore depth of fixing holes
	16	Quantity of fixing holes inner ring
d ₃	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 _A	8,5 Nm	Screw tightening torque
	2	Quantity of retaining screws
t ₁	3 μm	Axial and radial runout, measurement standard; Measured on mounted bearing, with ideal adjacent construction.

Dimensions

H ₁	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 ₂	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 _{1 max}	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/ μ m	Axial rigidity of bearing position
c_{rL}	3.150 N/ μ m	Radial rigidity of bearing position
c_{kL}	12.200 Nm/mrad	Tilting rigidity of bearing position
c_{aW}	8.700 N/ μ m	Axial rigidity of rolling element set
c_{rW}	5.200 N/ μ 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