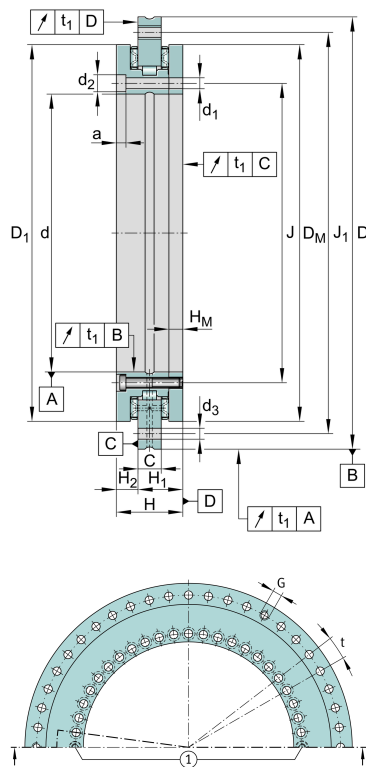


**YRTCM180-XL**

## Axial/radial roller bearing

Axial/radial bearings, double direction, screw mounting, with integrated angular measuring system

## Technical information



## Your current product variant

Angular measuring system integrated	M	with angular measuring system
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## Main Dimensions &amp; Performance Data

d	180 mm	Bore diameter
	0 mm	Bore diameter upper tolerance
	-0,013 mm	Bore diameter lower tolerance
D	280 mm	Outside diameter
	0 mm	Outside diameter upper tolerance
	-0,018 mm	Outside diameter lower tolerance
H	44 mm	Height
$C_r$	100.000 N	Basic dynamic load rating, radial
$C_{0r}$	200.000 N	Basic static load rating, radial
$C_a$	134.000 N	Basic dynamic load rating, axial
$C_{0a}$	730.000 N	Basic static load rating, axial
$n_G$	600 1/min	Limiting speed
$M_R$	5 Nm	Bearing friction torque at 5 1/min
$\approx m$	7,351 kg	Weight



### Mounting dimensions

J	194 mm	Pitch circle diameter fixing holes in inner ring
J <sub>1</sub>	260 mm	Pitch circle diameter fixing holes in outer ring
d <sub>1</sub>	7 mm	Fixing holes diameter inner ring
d <sub>2</sub>	11 mm	Counterbore diameter of fixing holes
a	6,2 mm	Counterbore depth of fixing holes
	46	Quantity of fixing holes inner ring
d <sub>3</sub>	7 mm	Fixing holes diameter outer ring
	45	Quantity of fixing holes outer ring
n	48	Pitch quantity
t	7,5 °	Pitch separation angle
G	M8	Threaded extraction hole
	3	Quantity of threaded extraction hole
M <sub>A</sub>	14 Nm	Screw tightening torque
	2	Quantity of retaining screws
t <sub>1</sub>	4 μm	Axial and radial runout, measurement standard; Measured on mounted bearing, with ideal adjacent construction.

### Dimensions

H <sub>1</sub>	30 mm	Height contact face outer ring
	0,03 mm	Height contact face outerring H1 upper tolerance
	-0,03 mm	Height contact face outerring H1 lower tolerance
H <sub>2</sub>	14 mm	Height contact face outer ring
	0,025 mm	Height contact face outerring H2 upper tolerance
	-0,025 mm	Height contact face outerring H2 lower tolerance
H <sub>M</sub>	10 mm	Height shaft washer
D <sub>1 max</sub>	245,1 mm	Maximum diameter inner ring
D <sub>M</sub>	244,38 mm	Diameter of dimensional scale on shaft locating washer
C	15 mm	Width of outer ring









### Temperature range

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

### Additional information

$c_{aL}$	9.400 N/ $\mu$ m	Axial rigidity of bearing position
$c_{rL}$	5.000 N/ $\mu$ m	Radial rigidity of bearing position
$c_{kL}$	46.000 Nm/mrad	Tilting rigidity of bearing position
$c_{aW}$	13.500 N/ $\mu$ m	Axial rigidity of rolling element set
$c_{rW}$	5.300 N/ $\mu$ m	Radial rigidity of rolling element set
$c_{kW}$	88.500 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