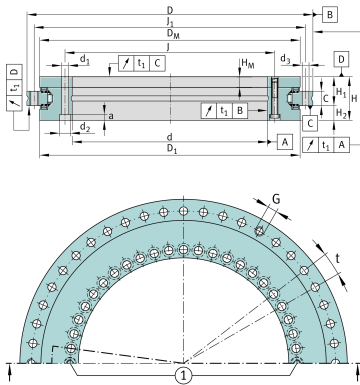


**YRTSM460** [↗](#)

Axial/radial roller bearing

Axial/radial bearings, double direction, screw mounting, for higher speeds, 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 & 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
$\approx m$	44,715 kg	Weight



Mounting dimensions

J	482 mm	Pitch circle diameter fixing holes in inner ring
J ₁	580 mm	Pitch circle diameter fixing holes in outer ring
d ₁	9,3 mm	Fixing holes diameter inner ring
d ₂	15 mm	Counterbore diameter of fixing holes
a	8,2 mm	Counterbore depth of fixing holes
	46	Quantity of fixing holes inner ring
d ₃	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 _A	34 Nm	Screw tightening torque
	2	Quantity of retaining screws
t ₁	6 μm	Axial and radial runout, measurement standard; Measured on mounted bearing, with ideal adjacent construction.

Dimensions

H ₁	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 ₂	24 mm	Height contact face outer ring
H _M	19 mm	Height shaft washer
D _{1 max}	560,9 mm	Maximum diameter inner ring
D _M	557,6 mm	Diameter of dimensional scale on shaft locating washer
C	22 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}	16.000 N/ μ m	Axial rigidity of bearing position
c_{rL}	7.200 N/ μ m	Radial rigidity of bearing position
c_{kL}	504.000 Nm/mrad	Tilting rigidity of bearing position
c_{aW}	25.400 N/ μ m	Axial rigidity of rolling element set
c_{rW}	9.500 N/ μ 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 ²	Mass moment of inertia for rotating outer ring
M_m	15.738 kg*cm ²	Mass moment of inertia for rotating inner ring

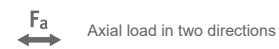
Characteristics



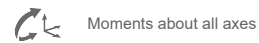
Radial load



Axial load in one direction



Axial load in two directions



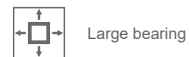
Moments about all axes



Grease Lubrication



Not sealed



Large bearing