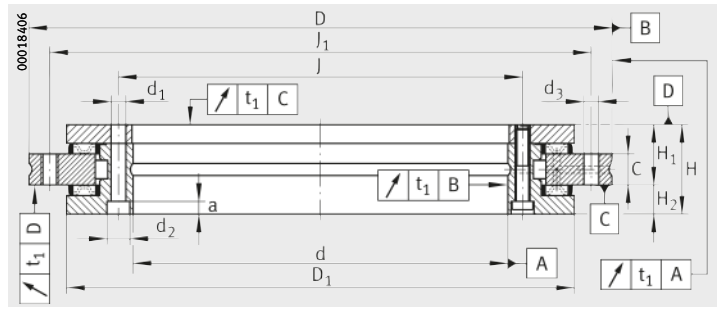


Axial/radial bearings

Double direction



YRT

Dimension table - Dimensions in mm

Designation	Mass m ≈ kg	Dimensions										Fixing holes			
		d	D	H	H ₁	H ₂	C	D ₁ max.	J	J ₁	Inner ring				
											d ₁	d ₂	a	Quantity ⁴⁾	
YRT50	1,6	50	126	30	20	10	10	105	63	116	5,6	–	–	10	
YRT80-TV⁵⁾⁷⁾	2,4	80	146	35	23,35	11,65	12	130	92	138	5,6	10	4	10	
YRT100⁵⁾	4,1	100	185	38	25	13	12	161	112	170	5,6	10	5,4	16	
YRT120	5,3	120	210	40	26	14	12	185	135	195	7	11	6,2	22	
YRT150	6,2	150	240	40	26	14	12	214	165	225	7	11	6,2	34	
YRT180	7,7	180	280	43	29	14	15	245,1	194	260	7	11	6,2	46	
YRT200	9,7	200	300	45	30	15	15	274,4	215	285	7	11	6,2	46	
YRT260	18,3	260	385	55	36,5	18,5	18	347	280	365	9,3	15	8,2	34	
YRT325⁵⁾	25	325	450	60	40	20	20	415,1	342	430	9,3	15	8,2	34	
YRT395	33	395	525	65	42,5	22,5	20	487,7	415	505	9,3	15	8,2	46	
YRT460	45	460	600	70	46	24	22	560,9	482	580	9,3	15	8,2	46	

1) Including retaining screws or threaded extraction holes.

2) Tightening torque for screws to DIN 912, grade 10.9.

3) Rigidity values taking account of the rolling element set, the deformation of the bearing rings and the screw connections. For explanations, see page 32.

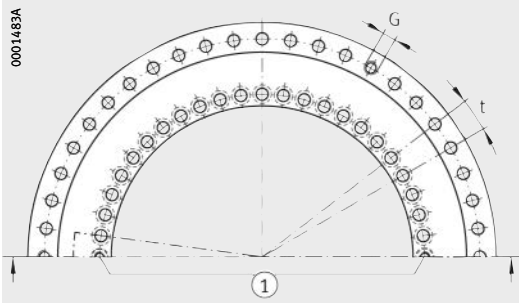
4) Attention!
For fixing holes in the adjacent construction. Observe the pitch of the bearing holes.

5) Screw counterbores in the L-section ring open to the bearing bore. The bearing inside diameter is unsupported in the area ②.

6) For high operating durations or continuous operation, please contact us.

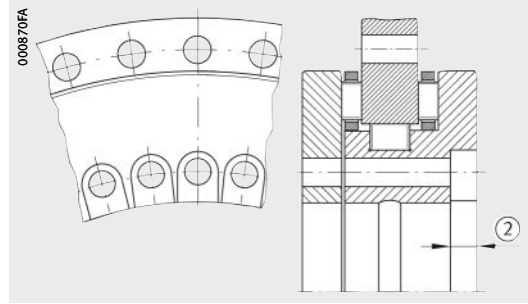
7) Cages made from glass fibre reinforced polyamide 66.

8) Measurement speed $n_{const} = 5 \text{ min}^{-1}$, bearing temperature +50 °C, after grease distribution cycle; frictional torque can only increase by 2,5 times up to the limiting speed.



Hole pattern

① Two retaining screws



YRT80-TV, YRT100, YRT325:

② Screw counterbores open⁵⁾

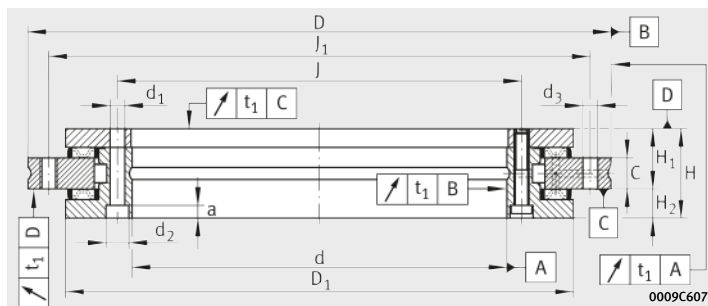
Outer ring		Pitch t ¹⁾	Threaded extraction hole		Screw tightening torque M _A ²⁾ Nm	Basic load ratings				Limiting speed ⁶⁾ n _G min ⁻¹	Bearing frictional torque ⁸⁾ M _R Nm
			Quantity	Xt		G	Quantity	axial			
d ₃	Quantity ⁴⁾					dyn. C _a N	stat. C _{0a} N	dyn. C _r N	stat. C _{0r} N		
5,6	12	12X30°	–	–	8,5	56 000	280 000	28 500	49 500	440	2,5
4,6	12	12X30°	–	–	8,5/4,5	38 000	158 000	44 000	98 000	350	3
5,6	15	18X20°	M5	3	8,5	73 000	370 000	52 000	108 000	280	3
7	21	24X15°	M8	3	14	80 000	445 000	70 000	148 000	230	7
7	33	36X10°	M8	3	14	85 000	510 000	77 000	179 000	210	13
7	45	48X7,5°	M8	3	14	92 000	580 000	83 000	209 000	190	14
7	45	48X7,5°	M8	3	14	98 000	650 000	89 000	236 000	170	15
9,3	33	36X10°	M12	3	34	109 000	810 000	102 000	310 000	130	25
9,3	33	36X10°	M12	3	34	186 000	1 710 000	134 000	415 000	110	48
9,3	45	48X7,5°	M12	3	34	202 000	2 010 000	133 000	435 000	90	75
9,3	45	48X7,5°	M12	3	34	217 000	2 300 000	187 000	650 000	80	100



Designation	Rigidity					
	of bearing position ³⁾			of rolling element set		
	axial c _{aL} kN/μm	radial c _{rL} kN/μm	Tilting rigidity c _{kL} kNm/mrad	axial c _{aL} kN/μm	radial c _{rL} kN/μm	Tilting rigidity c _{kL} kNm/mrad
YRT50	1,3	1,1	1,25	6,2	1,5	5,9
YRT80-TV⁵⁾⁷⁾	1,6	1,8	2,5	4	2,6	6,3
YRT100⁵⁾	2	2	5	6,8	2,4	15
YRT120	2,1	2,2	7	7,8	3,8	24
YRT150	2,3	2,6	11	8,7	4,6	38
YRT180	2,6	3	17	9,9	5,3	57
YRT200	3	3,5	23	11,2	6,2	80
YRT260	3,5	4,5	45	13,7	8,1	155
YRT325⁵⁾	4,3	5	80	26,1	9,4	422
YRT395	4,9	6	130	30,3	11,3	684
YRT460	5,7	7	200	33,5	13,9	1 049

Axial/radial bearings

Double direction



YRTC

Dimension table (continued) · Dimensions in mm

Designation	Mass m ≈kg	Dimensions									Fixing holes					
		d	D	H	H ₁	H ₂	C	D ₁	J	J ₁	Inner ring			Outer ring		
											d ₁	d ₂	a	Quantity ⁴⁾	d ₃	Quantity ⁴⁾
YRTC580	89	580	750	90	60	30	30	700	610	720	11,4	18	11	46	11,4	42
YRTC650	170	650	870	122	78	44	34	800	680	830	14	20	13	46	14	42
YRTC850	253	850	1095	124	80,5	43,5	37	1018	890	1055	18	26	17	58	18	54
YRTC1030	375	1030	1300	145	92,5	–	40	1215	1075	1255	18	26	17	70	18	66

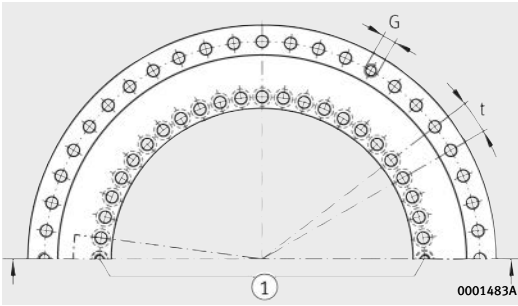
¹⁾ Including retaining screws or threaded extraction holes.

²⁾ Tightening torque for screws to DIN 912, grade 10.9.

³⁾ Rigidity values taking account of the rolling element set, the deformation of the bearing rings and the screw connections. For explanations, see page 32.

⁴⁾ Attention!
For fixing holes in the adjacent construction. Observe the pitch of the bearing holes.

⁵⁾ Screw counterbores in the L-section ring open to the bearing bore. The bearing inside diameter is unsupported in the area ②.



Hole pattern

① Two retaining screws

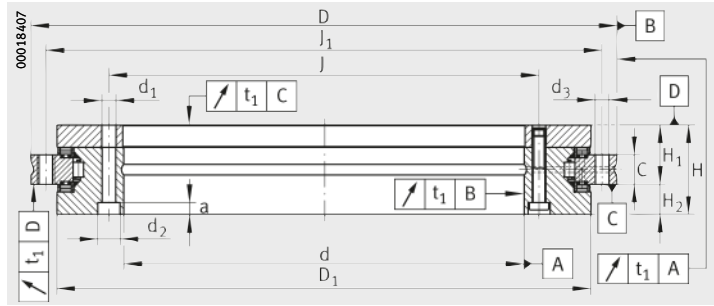
Pitch $t^1)$	Threaded extraction hole		Screw tightening torque $M_A^{2)}$ Nm	Basic load ratings				Limiting speed	
	G	Quantity		axial		radial		n_G	
				dyn. C_a	stat. C_{0a}	dyn. C_r	stat. C_{0r}	Continuous operation min ⁻¹	Swivel type operation, short operating duration min ⁻¹
48X7,5°	M12	6	68	510 000	4 450 000	208 000	730 000	80	200
48X7,5°	M12	6	116	810 000	6 800 000	405 000	1 300 000	70	170
60X6°	M16	6	284	900 000	8 500 000	460 000	1 690 000	50	125
72X5°	M16	6	284	1 000 000	10 300 000	510 000	2 050 000	40	100



Designation	Rigidity					
	of bearing position ³⁾			of rolling element set		
	axial	radial	Tilting rigidity	axial	radial	Tilting rigidity
	c_{aL} kN/ μ m	c_{rL} kN/ μ m	c_{kL} kNm/mrad	c_{aL} kN/ μ m	c_{rL} kN/ μ m	c_{kL} kNm/mrad
YRTC580	11,9	2,9	735	41,8	11,2	1 960
YRTC650	20,6	7,3	1 193	51,4	8,2	3 554
YRTC850	26,5	11,9	2 351	61,9	12	6 772
YRTC1030	36,4	11,2	5 400	74,9	14,2	11 165

Axial/radial bearings

Double direction

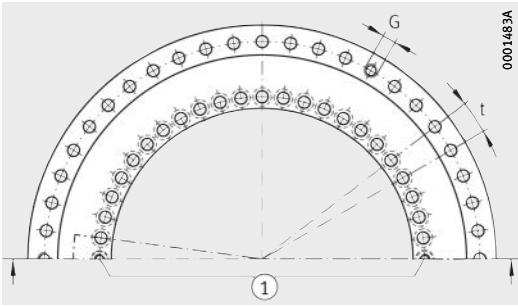


YRTS

Dimension table - Dimensions in mm

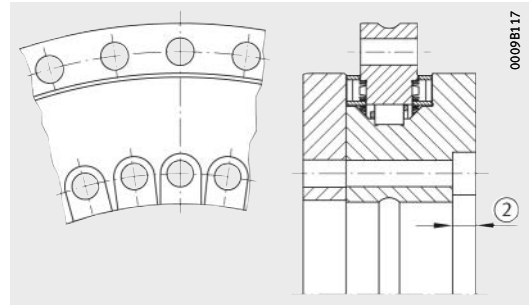
Designation	Mass m ≈ kg	Dimensions									Fixing holes					
		d	D	H	H ₁	H ₂	C	D ₁ max.	J	J ₁	Inner ring			Outer ring		
											d ₁	d ₂	a	Quantity ³⁾	d ₃	Quantity ³⁾
YRTS200	9,7	200	300	45	30	15	15	274,4	215	285	7	11	6,2	46	7	45
YRTS260	18,3	260	385	55	36,5	18,5	18	347	280	365	9,3	15	8,2	34	9,3	33
YRTS325⁵⁾	25	325	450	60	40	20	20	415,1	342	430	9,3	15	8,2 ⁵⁾	34	9,3	33
YRTS395	33	395	525	65	42,5	22,5	20	487,7	415	505	9,3	15	8,2	46	9,3	45
YRTS460	45	460	600	70	46	24	22	560,9	482	580	9,3	15	8,2	46	9,3	45

- 1) Including retaining screws or threaded extraction holes.
- 2) For screws to DIN 912, grade 10.9.
- 3) Attention!
For fixing holes in the adjacent construction.
Observe the pitch of the bearing holes.
- 4) Rigidity values taking account of the rolling element set,
the deformation of the bearing rings and the screw connections.
For explanations, see page 32.
- 5) Screw counterbores in the L-section ring open to the bearing bore.
The bearing inside diameter is unsupported in the area ②.



Hole pattern

① Two retaining screws



For YRTS325:

② Screw counterbores open⁵⁾

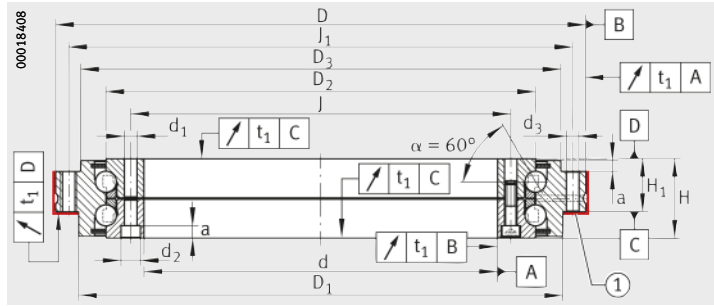
Pitch t ¹⁾	Threaded extraction hole		Screw tightening torque M _A ²⁾ Nm	Basic load ratings				Limiting speed n _G min ⁻¹	Mass moment of inertia for rotating	
	G	Quantity		axial		radial			Inner ring IR M _M kg·cm ²	Outer ring AU kg·cm ²
				dyn. C _a N	stat. C _{0a} N	dyn. C _r N	stat. C _{0r} N			
48X7,5°	M8	3	14	155 000	840 000	94 000	226 000	1 160	667	435
36X10°	M12	3	34	173 000	1 050 000	110 000	305 000	910	2 074	1 422
36X10°	M12	3	34	191 000	1 260 000	109 000	320 000	760	4 506	2 489
48X7,5°	M12	3	34	214 000	1 540 000	121 000	390 000	650	8 352	4 254
48X7,5°	M12	3	34	221 000	1 690 000	168 000	570 000	560	15 738	7 379



Designation	Rigidity					
	of bearing position ⁴⁾			of rolling element set		
	axial c _{aL} kN/μm	radial c _{rL} kN/μm	Tilting rigidity c _{kL} kNm/mrad	axial c _{aL} kN/μm	radial c _{rL} kN/μm	Tilting rigidity c _{kL} kNm/mrad
YRTS200	4	1,2	29	13,6	3,9	101
YRTS260	5,4	1,6	67	16,8	5,8	201
YRTS325⁵⁾	6,6	1,8	115	19,9	7,1	350
YRTS395	7,8	2	195	23,4	8,7	582
YRTS460	8,9	1,8	280	25,4	9,5	843

Axial angular contact ball bearings

Double direction



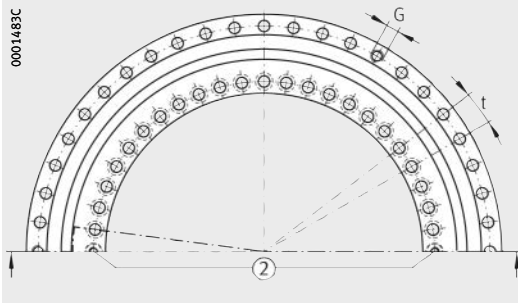
ZKLDF
 ① Contact surface/centring diameter

Dimension table - Dimensions in mm

Designation	Mass m ≈kg	Dimensions										Fixing holes				
		d	D	H	H ₁	D ₁	D ₂	D ₃	J	J ₁	a	Inner ring			Outer ring	
												d ₁	d ₂	Quantity ⁴⁾	d ₃	Quantity ⁴⁾
ZKLDF100 ⁵⁾	3,8	100	185	38	25	161	136	158	112	170	5,4	5,6	10	16	5,6	15
ZKLDF120	4,8	120	210	40	26	185	159	181	135	195	6,2	7	11	22	7	21
ZKLDF150	5,6	150	240	40	26	214	188	211	165	225	6,2	7	11	34	7	33
ZKLDF180	7,7	180	280	43	29	244	219	246	194	260	6,2	7	11	46	7	45
ZKLDF200	10	200	300	45	30	274	243	271	215	285	6,2	7	11	46	7	45
ZKLDF260	19	260	385	55	36,5	345	313	348	280	365	8,2	9,3	15	34	9,3	33
ZKLDF325 ⁵⁾	25	325	450	60	40	415	380	413	342	430	8,2	9,3	15	34	9,3	33
ZKLDF395	33	395	525	65	42,5	486	450	488	415	505	8,2	9,3	15	46	9,3	45
ZKLDF460	47	460	600	70	46	560	520	563	482	580	8,2	9,3	15	46	9,3	45

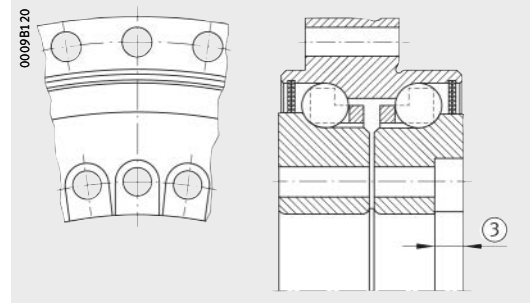
Dimensions d > 460 mm available by agreement.

- 1) Including retaining screws or threaded extraction holes.
- 2) Tightening torque for screws to DIN 912, grade 10.9.
- 3) Rigidity values taking account of the rolling element set, the deformation of the bearing rings and the screw connections. For explanations, see page 32.
- 4) Attention!
For fixing holes in the adjacent construction. Note the pitch of the bearing holes.
- 5) Screw counterbores in the L-section ring open to the bearing bore. The bearing inside diameter is unsupported in the area ③.
- 6) The limiting speeds increased by a factor of two are valid for bearings of the current generation with the internal suffix -B.



Hole pattern

② Two retaining screws



For ZKLDF100, ZKLDF325:

③ Screw counterbores open⁵⁾

Pitch ^t ¹⁾	Threaded extraction hole		Screw tightening torque M_A ²⁾ Nm	Basic load ratings		Limiting speed ⁶⁾ n_G min ⁻¹
	G	Quantity		axial		
QuantityXt				dyn. C_a N	stat. C_{0a} N	
18X20°	M5	3	8,5	71 000	265 000	5 000
24X15°	M8	3	14	76 000	315 000	4 300
36X10°	M8	3	14	81 000	380 000	3 600
48X7,5°	M8	3	14	85 000	440 000	3 500
48X7,5°	M8	3	14	121 000	610 000	3 200
36X10°	M12	3	34	162 000	920 000	2 400
36X10°	M12	3	34	172 000	1 110 000	2 000
48X7,5°	M12	3	34	241 000	1 580 000	1 600
48X7,5°	M12	3	34	255 000	1 860 000	1 400



Designation	Rigidity					
	of bearing position ³⁾			of rolling element set		
	axial c_{aL} kN/ μ m	radial c_{rL} kN/ μ m	Tilting rigidity c_{kL} kNm/mrad	axial c_{aL} kN/ μ m	radial c_{rL} kN/ μ m	Tilting rigidity c_{kL} kNm/mrad
ZKLDF100 ⁵⁾	1,2	0,35	3,6	2,2	0,35	5
ZKLDF120	1,5	0,4	5,5	2,5	0,4	8
ZKLDF150	1,7	0,4	7,8	2,9	0,4	12
ZKLDF180	1,9	0,5	10,7	2,8	0,5	16
ZKLDF200	2,5	0,6	17,5	3,7	0,6	26
ZKLDF260	3,2	0,7	40	4,7	0,7	54
ZKLDF325 ⁵⁾	4	0,8	60	5,4	0,8	90
ZKLDF395	4,5	0,9	100	6,3	0,9	148
ZKLDF460	5,3	1,1	175	7,1	1,1	223