

Cylindrical roller bearings for cable sheaves

Series SL04 50..PP B



Simple adjacent construction, easy to fit



Features

Cylindrical roller bearings for cable sheaves are proven, ready-to-fit machine elements. They consist of machined outer and inner rings, rib guided cylindrical rollers and sealing rings.

In order to allow more economical application of these bearings, the existing design has been completely revised in technical terms. In the new generation, the inner rings are single-piece components. This means they no longer require axial location. This gives a simpler adjacent construction and easier fitting of the bearings.

The outer rings have two annular slots. As a result, the bearing can easily be axially located in the cable sheave by means of retaining rings WRE or to DIN 471.

Cable sheave bearings

- are double row locating bearings with a full complement cylindrical roller set
- can support axial forces from both directions as well as radial forces
- have the maximum possible basic dynamic and static load ratings due to the full complement design
- have high rigidity
- are protected against contaminants and water spray by lip seals on both sides
- are greased with lithium soap grease to DIN 51 825–KP2N–20
- can be relubricated via the inner ring
- have dimensional and geometrical tolerances in accordance with tolerance class PN to DIN 620
- are suitable for operating temperatures from -30 °C to $+80\text{ °C}$.

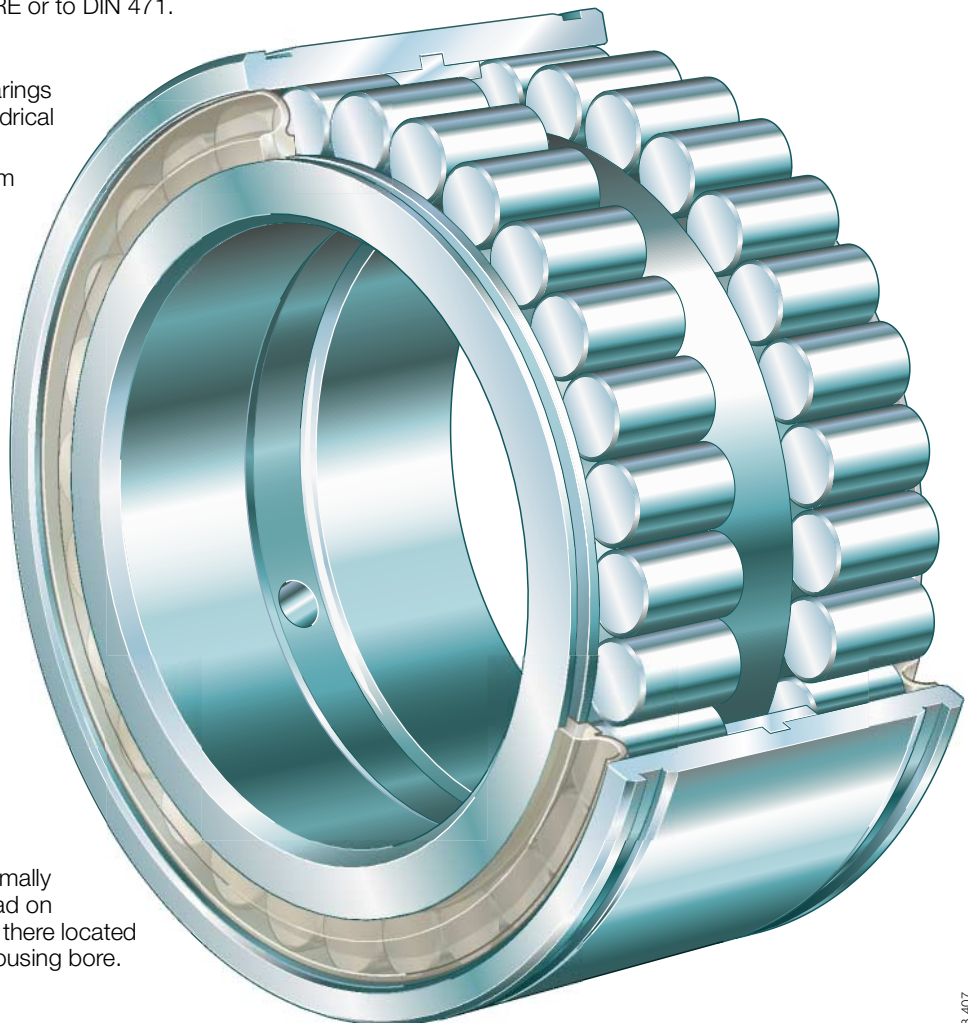
Cable sheave bearings are normally subjected to circumferential load on the outer ring. The outer ring is there located with an interference fit in the housing bore.

Applications

With INA cable sheave bearings, it is possible to achieve particularly economical designs that are precisely matched to the operating conditions and load parameters.

They are particularly suitable:

- for cable sheave bearing arrangements
- in vehicle cranes, mobile cranes and off-road cranes
- in offshore applications.

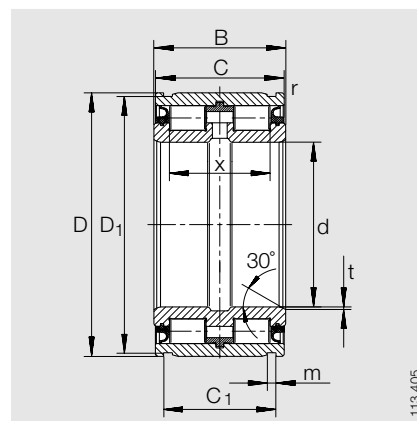


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full complement, double row, sealed on both sides

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Dimension table · Dimensions in mm

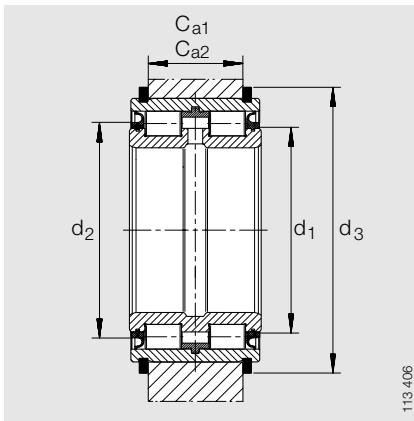
Shaft diameter d	Designation	Mass m ≈kg	Dimensions									
			d	D	B	C	C ₁	D ₁	m	r	t	x
20	SL04 5004 PP B	0,2	20	42	30	29	24,7	40,2	1,8	0,3	0,5	22,5
25	SL04 5005 PP B	0,24	25	47	30	29	24,7	45,2	1,8	0,3	0,5	22,5
30	SL04 5006 PP B	0,37	30	55	34	33	28,2	53	2,1	0,3	0,5	25,5
35	SL04 5007 PP B	0,48	35	62	36	35	30,2	60	2,1	0,3	0,5	27,5
40	SL04 5008 PP B	0,56	40	68	38	37	32,2	65,8	2,7	0,6	0,8	28,5
45	SL04 5009 PP B	0,7	45	75	40	39	34,2	72,8	2,7	0,6	0,8	30,5
50	SL04 5010 PP B	0,76	50	80	40	39	34,2	77,8	2,7	0,6	0,8	30,5
55	SL04 5011 PP B	1,18	55	90	46	45	40,2	87,4	3,2	0,6	1	36
60	SL04 5012 PP B	1,26	60	95	46	45	40,2	92,4	3,2	0,6	1	36
65	SL04 5013 PP B	1,33	65	100	46	45	40,2	97,4	3,2	0,6	1	36
70	SL04 5014 PP B	1,87	70	110	54	53	48,2	107,1	4,2	0,6	1	40
75	SL04 5015 PP B	1,96	75	115	54	53	48,2	112,1	4,2	0,6	1	42

⚠ For the design of bearing arrangements, fitting and operation of the bearings, see *Principles of rolling bearing technology* in *INA Catalogue "307"*.

Special designs

Available by agreement:

- bearings with Corrotect® plating
– suffix RR
- bearings sealed on one side only
– suffix P
- bearings without seals
– no suffix
- radial internal clearance other than normal, e.g. C3
– suffix C3
- bearings with two retaining rings WRE supplied loose
– suffix 2NR.



Mounting dimensions

Basic load ratings		Fatigue limit load P_u kN	Limiting speed n_G Grease min^{-1}	Mounting dimensions					Snap ring WRE ¹⁾	Retaining ring DIN 471 ¹⁾	Shaft diameter d
dyn. C kN	stat. C_0 kN			C_{a1} ²⁾ -0,2	C_{a2} ³⁾ -0,2	d_1	d_2	d_3 ²⁾			
40,5	49	7,2	4 000	21,5	21	31	34	47	WRE 42	42×1,75	20
44,5	58	7,9	3 600	21,5	21	35,5	39	52	WRE 47	47×1,75	25
50	67	9,2	3 000	25	24	41	44	60	WRE 55	55×2	30
63	88	11,8	2 600	27	26	46,5	50	67	WRE 62	62×2	35
76	103	14,7	2 400	28	27	51,5	55	75	WRE 68	68×2,5	40
92	130	18,1	2 200	30	29	57,5	61	82	WRE 75	75×2,5	45
97	142	19,8	2 000	30	29	62	66	87	WRE 80	80×2,5	50
115	175	24	1 800	35	34	69	73	99	WRE 90	90×3	55
120	189	26	1 700	35	34	74	79	104	WRE 95	95×3	60
125	203	28	1 600	35	34	79	84	109	WRE 100	100×3	65
168	265	35	1 400	43	40	85	91	119	WRE 110	110×4	70
194	300	39,5	1 400	43	40	90	97	124	WRE 115	115×4	75

¹⁾ Not included in delivery:

- WRE must be ordered separately.
- retaining rings to DIN 471 are available via trade outlets.

²⁾ For snap rings WRE.

³⁾ For retaining rings to DIN 471.



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