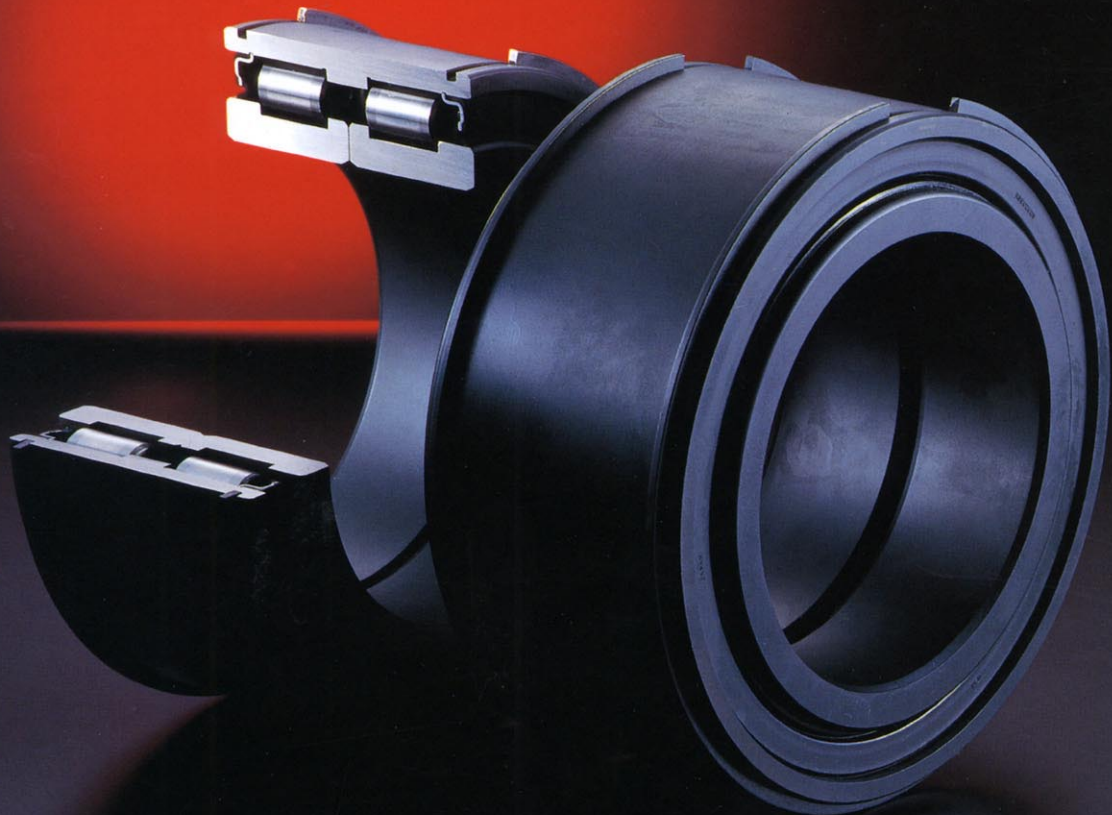


# Full-Complement Cylindrical Roller Bearings for Crane Sheaves

Cylindrical roller bearings equipped with advanced NSK seals to prevent entry of foreign substances

Japanese  
Standard

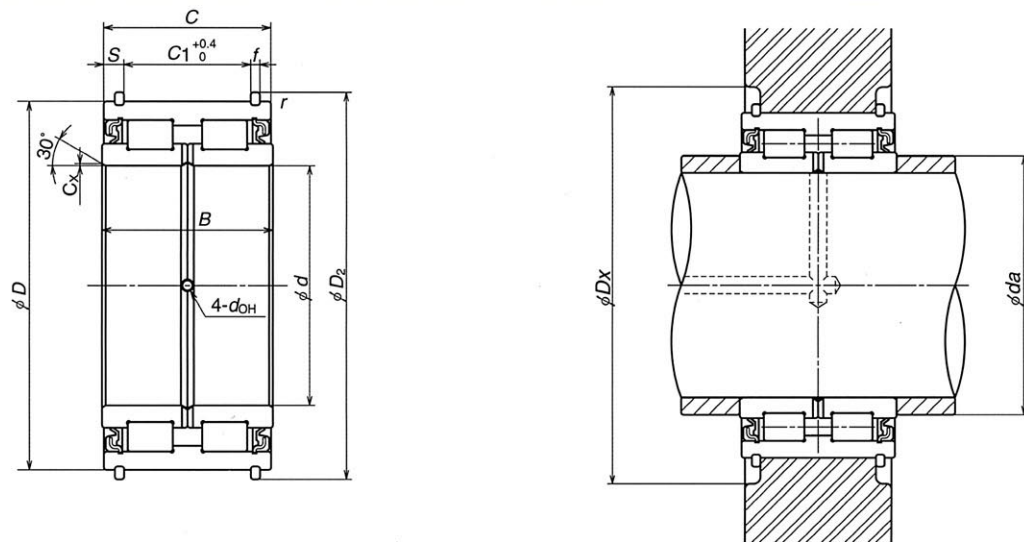




# Full-Complement Cylindrical Roller Bearings for Crane Sheaves

## 1. Features

- (1) **Improved seal** ..... Contact seal increases resistance to entry of water or foreign substances.
- (2) **High load capacity** ..... When used as a sheave bearing, radial and axial load capacities are increased.
- (3) **Corrosion resistance** ..... Phosphate surface treatment improves resistance to rust.
- (4) **Easy to apply grease** ..... Holes provided on inner ring facilitate grease replenishment, even while the bearing is mounted.
- (5) **Fewer surrounding parts** ..... With snap rings for the outer ring, fewer parts are required around the bearing for a more cost-effective sheave.



## 2. Assembly examples

Assembly examples utilizing Full-Complement Cylindrical Roller Bearings are shown in Figs.1 and 2. Both bearings have rotating outer rings; an outer ring is fitted into the housing by interference, and the inner ring is fitted on the shaft with slight clearance. The inner ring is secured with an end-plate. A lubrication hole is provided on the shaft for grease replenishment using a grease gun.

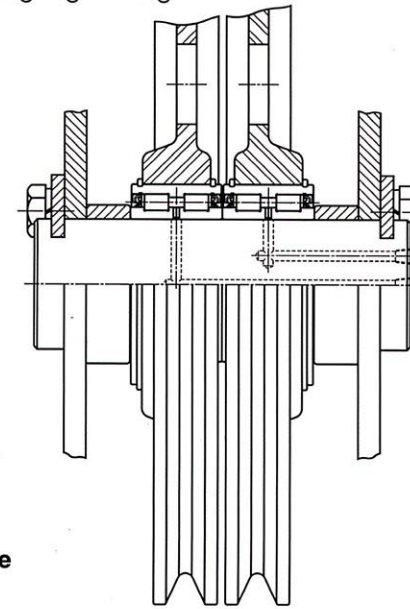


Fig.1 Crane sheave

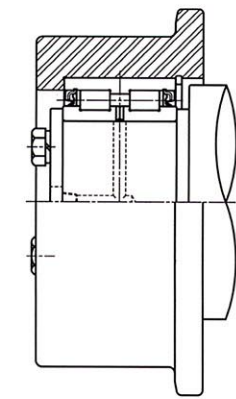


Fig.2 Wagon wheel

## 3. Recommended fitting and bearing internal clearance

When a crane sheave and wheel are used with an outer ring rotating load, bearing fitting and radial internal clearance are as follows:

	Load conditions	Tolerance range class of shaft	Tolerance range class of housing	Recommended internal clearance
Outer ring rotating	Heavy load with thin housing	g6 or h6	P7	C3
	Normal load or heavy load	g6 or h6	N7	C3
	Light load or fluctuating load	g6 or h6	M7	CN

## 4. Handling precautions

Be sure to push on the end face of the outer ring when mounting the bearing into a sheave. When mounting the bearing on a shaft, push on the end face of the inner ring.

Bearing No.	Boundary dimensions (mm)						Basic load rating				Snap ring dimensions (mm)				Oil hole (mm)	Abutment dimensions (mm)		Mass (kg)
	d	D	B	C	Cx (min)	r (min)	(N)		{kgf}		C <sub>1</sub>	S	D <sub>2</sub>	f	d <sub>OH</sub>	d <sub>a</sub> (min)	D <sub>x</sub> (min)	(approx)
							Cr	Cor	Cr	Cor								
RS-5008DSNR	40	68	38	37	0.4	0.6	79 500	116 000	8 100	11 800	28	4.5	71.8	2	2.5	43.5	77.5	0.56
RS-5009DSNR	45	75	40	39	0.4	0.6	95 500	144 000	9 750	14 700	30	4.5	78.8	2	2.5	48.5	84.5	0.70
RS-5010DSNR	50	80	40	39	0.4	0.6	100 000	158 000	10 200	16 100	30	4.5	83.8	2	2.5	53.5	89.5	0.76
RS-5011DSNR	55	90	46	45	0.6	0.6	118 000	193 000	12 100	19 700	34	5.5	94.8	2.5	3	60	101	1.17
RS-5012DSNR	60	95	46	45	0.6	0.6	123 000	208 000	12 600	21 200	34	5.5	99.8	2.5	3	65	106	1.25
RS-5013DSNR	65	100	46	45	0.6	0.6	128 000	224 000	13 100	22 800	34	5.5	104.8	2.5	3	70	111	1.32
RS-5014DSNR	70	110	54	53	0.6	0.6	171 000	285 000	17 500	29 000	42	5.5	114.5	2.5	3	75	121	1.87
RS-5015DSNR	75	115	54	53	0.6	0.6	179 000	305 000	18 200	31 500	42	5.5	119.5	2.5	3	80	126	2.0
RS-5016DSNR	80	125	60	59	0.6	0.6	251 000	430 000	25 600	43 500	48	5.5	129.5	2.5	3	85	136	2.65
RS-5017DSNR	85	130	60	59	0.6	0.6	256 000	445 000	26 200	45 500	48	5.5	134.5	2.5	3	90	141	2.75
RS-5018DSNR	90	140	67	66	1	0.6	305 000	540 000	31 000	55 000	54	6	145.4	2.5	4	96	153.5	3.75
RS-5019DSNR	95	145	67	66	1	0.6	310 000	565 000	32 000	57 500	54	6	150.4	2.5	4	101	158.5	3.95
RS-5020DSNR	100	150	67	66	1	0.6	320 000	585 000	32 500	59 500	54	6	155.4	2.5	4	106	163.5	4.05
RS-5022DSNR	110	170	80	79	1.1	1	385 000	695 000	39 000	71 000	65	7	175.5	2.5	5	116.5	183.5	6.1
RS-5024DSNR	120	180	80	79	1.1	1	400 000	750 000	40 500	76 500	65	7	188	3	5	126.5	197	7.0
RS-5026DSNR	130	200	95	94	1.1	1	535 000	1 000 000	54 500	102 000	77	8.5	207	3	5	136.5	217	10.6

Notes: 1. Bearing No. DS indicates seal is included.  
 2. Shield type can be provided upon request. For details, please contact NSK.  
 3. For specification higher than RS-5026, please contact NSK.

4. Grease is factory-packed into the bearing. NSK recommends lithium grease for replenishing.  
 5. Bearings without snap ring groove, or without snap rings are also available upon request.