

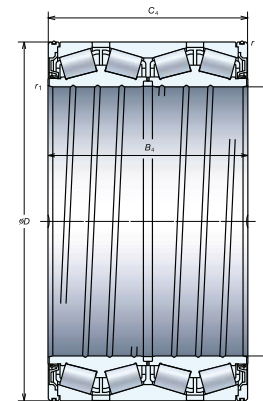
Dimensions of Bearings for Rolling Mills

Water-TF Bearings - WTF-Series

Bearing Numbers	Boundary Dimensions (mm/inch)						Basic Load Ratings (kN)		Constant ^e	Axial Load Factors	
	d	D	B _a	C _a	r (min)	r ₁ (min)	C _r	C _{0r}		Y ₂	Y ₃
WTF170KVS2401Eg	170	240	175	175	2.5	2.5	1 020	2 010	0.32	3.2	2.1
*WTF215KVS2851Eg	215.900 (8.5000)	288.925 (11.750)	177.800 (7.0000)	177.800 (7.0000)	3.3	0.8	1 070	2 350	0.49	2.1	1.4
*WTF216KVS3351Eg	216.103 (8.5080)	330.2 (13.0000)	263.525 (10.3750)	263.525 (10.3750)	3.3	1.5	2 290	4 550	0.46	2.2	1.5
WTF220KVS3301Eg	220	330	260	260	3.0	4.0	2 330	4 800	0.40	2.5	1.7
*WTF234KVS3251Eg	234.950 (9.2500)	327.025 (12.8750)	196.850 (7.7500)	196.850 (7.7500)	3.3	1.5	1 550	3 200	0.46	2.2	1.5
*WTF244KVS3215Eg	244.475 (9.6250)	327.025 (12.8750)	193.680 (7.6250)	193.680 (7.6250)	3.0	1.5	1 370	3 050	0.40	2.5	1.7
WTF245KVS3402Eg	245	345	310	310	3.0	2.0	2 700	6 650	0.40	2.5	1.7
*WTF254KVS352Eg	254.000 (10.0000)	358.775 (14.1250)	269.875 (10.6250)	269.875 (10.6250)	3.3	1.5	2 420	5 500	0.40	2.5	1.7
WTF260KVS3601Eg	260	365	340	340	4.0	2.7	2 960	7 350	0.40	2.5	1.7
WTF260KVS3651Eg	260	365	340	340	4.0	2.5	2 960	7 350	0.40	2.5	1.7
*WTF260KVS4251Eg	260.350 (10.2500)	422.275 (16.6250)	314.325 (12.3750)	314.325 (12.3750)	3.3	6.4	3 600	7 050	0.33	3.0	2.0
*WTF266KVS3551Eg	266.700 (10.5000)	355.600 (14.0000)	230.188 (9.0625)	230.188 (9.0625)	3.3	1.5	1 960	4 600	0.35	2.9	1.9
*WTF76KVS3952Eg	276.225 (10.8750)	393.700 (15.5000)	269.875 (10.6251)	269.875 (10.6251)	3.3	1.5	2 720	6 100	0.45	2.2	1.5
*WTF279KVS3952Eg	279.400 (11.0000)	393.700 (15.5000)	269.875 (10.6251)	269.875 (10.6251)	6.4	1.5	2 720	6 100	0.45	2.2	1.5
*WTF279KVS3954Eg	279.4	393.7	320	320	6.4	1.5	3 100	7 350	0.40	2.5	1.7
WTF290KVS4001Eg	290	400	346	346	4.0	3.0	3 250	8 400	0.40	2.5	1.7
*WTF304KVS4351Eg	304.648 (11.9940)	438.048 (17.2460)	280.990 (11.6260)	280.990 (11.6260)	3.3	3.3	3 100	6 750	0.45	2.2	1.5
*WTF304KVS4155Eg	304.800 (12.0000)	419.100 (16.5000)	269.875 (10.6250)	269.875 (10.6250)	3.0	1.5	2 850	6 550	0.33	3.0	2.0
*WTF304KVS4152Eg	304.902 (12.0040)	412.648 (16.2500)	266.700 (10.50000)	266.700 (10.50000)	3.0	1.5	2 760	6 500	0.33	3.0	2.0
WTF310KVS4301Eg	310	430	310	310	3.3	3.0	3 350	8 200	0.46	2.2	1.5
WTF310KVS4302Eg	310	430	350	350	3.3	2.7	3 700	9 550	0.46	2.2	1.5
*WTF317KVS4251Eg	317.500 (12.5000)	422.275 (16.6250)	269.875 (10.6250)	269.875 (10.6250)	3.3	1.5	2 740	6 750	0.34	3.0	2.0



Bearing Numbers	Boundary Dimensions (mm/inch)						Basic Load Ratings (kN)		Constant ^e	Axial Load Factors	
	d	D	B _a	C _a	r (min)	r ₁ (min)	C _r	C _{0r}		Y ₂	Y ₃
*WTF343KVS4551Eg	340.052 (13.5060)	457.098 (17.9960)	254.000 (10.0000)	254.000 (10.0000)	3.3	1.5	2 830	6 700	0.45	2.2	1.5
*WTF355KVS4551Eg	355.600 (14.0000)	457.200 (18.0000)	252.412 (9.9375)	252.412 (9.9375)	3.3	1.5	2 650	6 750	0.32	3.2	2.1
*WTF406KVS451Eg	406.400 (16.0000)	546.100 (21.5000)	288.925 (11.3750)	288.925 (11.3750)	6.4	1.5	3 950	9 450	0.48	2.1	1.4
WTF450KVS5901Eg	450	595	368	368	5.0	4.0	5 550	15 000	0.33	3.0	2.0
*WTF457KVS5951Eg	457.200 (18.0000)	596.900 (23.5000)	276.225 (10.8750)	276.225 (10.8750)	3.3	1.5	4 000	9 850	0.47	2.2	1.4
WTF482KVS6151Eg	482.600 (19.0000)	615.950 (24.2500)	330.200 (13.0000)	330.200 (13.0000)	6.4	4.3	4 900	13 500	0.33	3.1	2.1



Dynamic Equivalent Load
 $P = X F_r + Y F_a$

$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	Y_3	0,67	Y_2

Static Equivalent Load

$$P_0 = F_r + Y_0 F_a$$

Where $Y_0 = Y_3$

The values of e , Y_2 and Y_3 are given in the table.

Remarks (*) Bearings marked * are inch designs.
Water-TF Bearings are a special purpose bearing series in the same design as the standard Extra-Capacity Sealed-Clean Four-Row Tapered Roller Bearings.
Other bearings are available. Please contact NSK for additional information.

Dimensions of Bearings for Rolling Mills

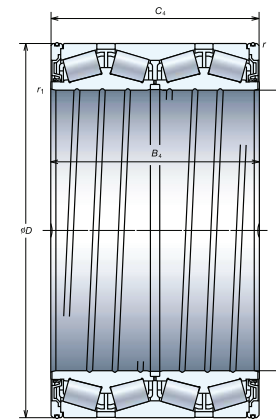
Extra-Capacity Sealed-Clean Four-Row Tapered Roller Bearings - KVS Series

Bearing Numbers	Boundary Dimensions (mm/inch)						Basic Load Ratings (kN)		Constant ^e	Axial Load Factors	
	d	D	B _a	C _a	r (min)	r ₁ (min)	C _r	C _{0r}		Y ₂	Y ₃
STF170KVS2401Eg	170	240	175	175	2.5	2.5	1 020	2 010	0.32	3.2	2.1
*STF215KVS2851Eg	215.900 (8.5000)	288.925 (11.3750)	177.800 (7.0000)	177.800 (7.0000)	3.3	0.8	1 070	2 350	0.49	2.1	1.4
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STF245KVS3402Eg	245	345	310	310	3.0	2.0	2 700	6 650	0.40	2.5	1.7
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STF260KVS3651Eg	260	365	340	340	4.0	2.5	2 960	7 350	0.40	2.5	1.7
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X	Y	X	Y
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Static Equivalent Load

$$P_0 = F_r + Y_0 F_a$$

Where $Y_0 = Y_3$

The values of e , Y_2 and Y_3 are given in the table.

Remarks 1. Extra-Capacity Sealed-Clean Four-Row Tapered Roller Bearings are made of NSK Super-TF material as the standard specification
2. Bearings marked * are inch design and numerical values in parentheses under Boundary Dimensions are in inches.