

Wheel Bearings Intro

INTEGRAL SEALED BEARING SPINDLES (ISBS)

NTN-BCA® offers a broad line of ball type ISBS bearings. This innovation incorporates a double row angular contact unitized assembly that eliminates the need for an expensive separate hub, seal, housing and bearing. This prevents tolerance stack ups, multiple parts sources, and simplifies installation. The compact design reduces frictional losses lowering both torque and operating temperatures. Although primarily used for automotive wheel ends, these bearings are also used on trailers and in industrial applications.

They are lubricated for life and fully sealed. ISBS bearings which are splined are used on Driven Shafts, non-splined versions are used on Non-Driven Shafts.

All ISBS bearings must be preloaded prior to usage to properly seat internal components. Consult the manufacturers' specifications manual or call NTN for recommended torque values.

Front Wheel Bearings

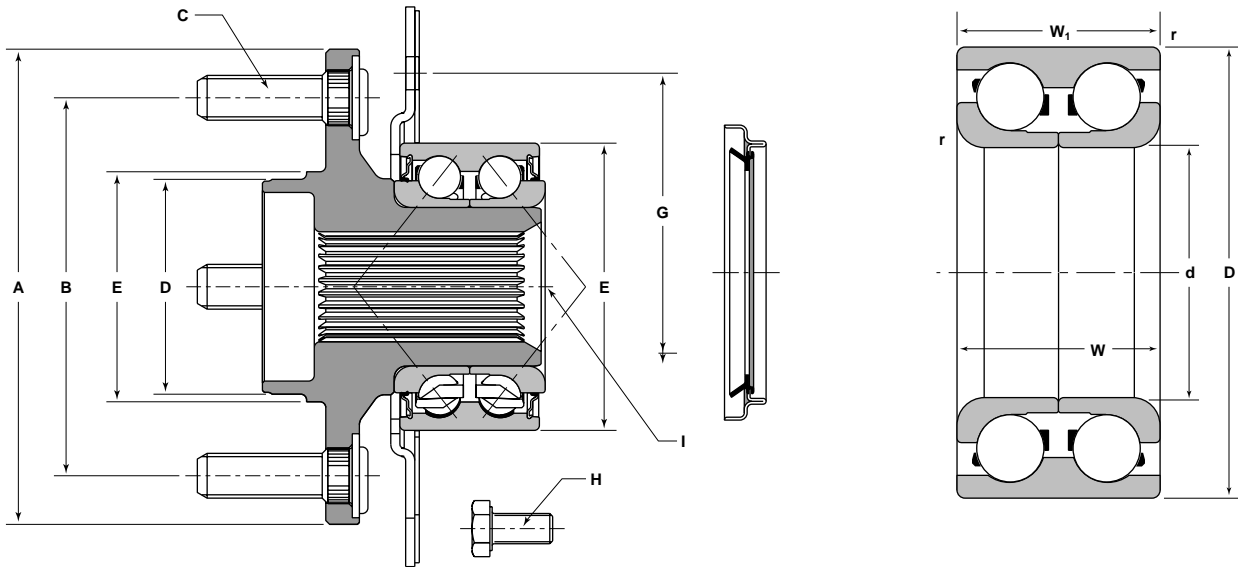
NTN-BCA® Front Wheel ball bearings are angular contact bearings. This design is used primarily to support radial and thrust loads encountered in front wheel applications. These bearings can also be used in other applications where both radial and thrust loads are present.

Rear Wheel Bearings

NTN-BCA® offers a number of rear wheel bearings. Many rear wheel bearings are sealed units, lubricated for life with a stable, long lasting grease. An additional oil seal is generally used between the bearing and the differential in order to retain the differential oil within the axle housing. Several of the bearings in the RW series are designed with a heavy duty spring-loaded seal on one side which eliminates the need for an additional seal to retain the differential oil.

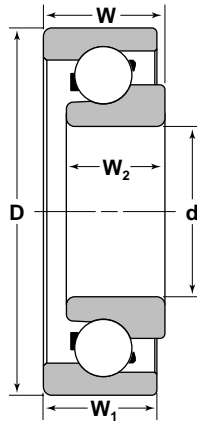
Integral Sealed Bearing Spindles (ISBS)

Driven Shafts



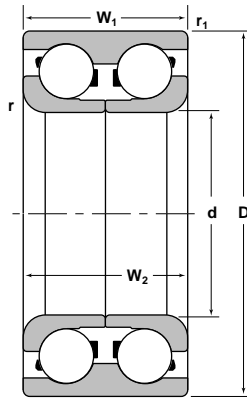
NTN-BCA® Bearing Number	Spindle					Hub			
	A Flange Diameter	B Flange Diameter	C Bolt Size (Quantity)	D Wheel Pilot Diameter	E Brake Pilot Diameter	F Hub Pilot Diameter	G Bolt Circle Diameter	H Bolt Size (Quantity)	I Number of Splines
	Inch/mm								
FW4H5908B	4.800	3.937 100.00	M12X5-6G (4)	2.238	2.396	2.992	3.701 94.00	M8X1.25 (3)	26
FW4H5908E	4.950	3.937 100.00	M12X5-6G (4)	2.238	2.396	2.992	4.449 113.00	M8X1.25 (3)	26
FW5H5908E	4.950	3.937 100.00	M12X5-6G (5)	2.238	2.396	2.992	4.449 113.00	M8X1.25 (3)	26

Front Wheel Bearings Single Row



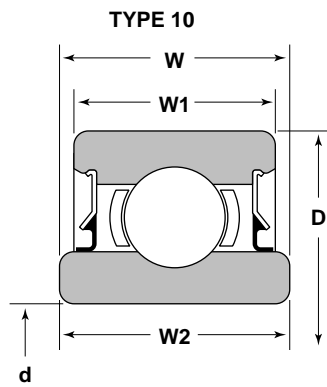
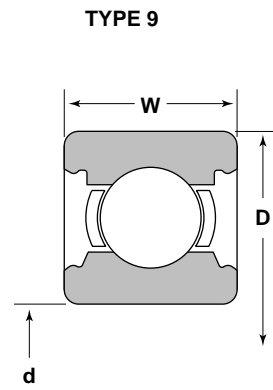
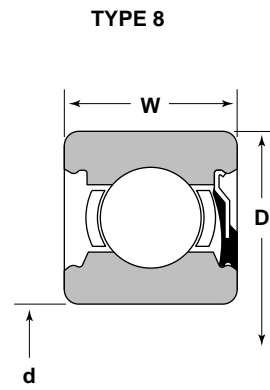
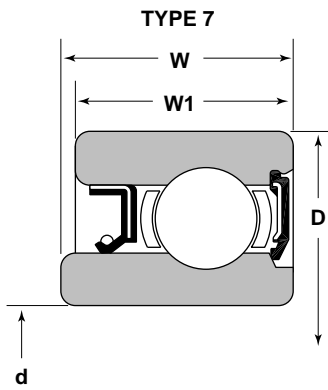
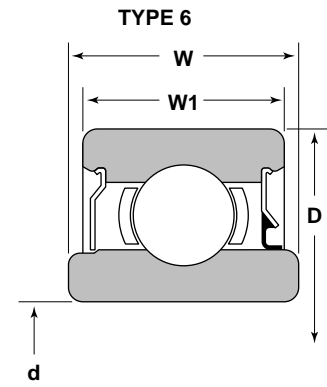
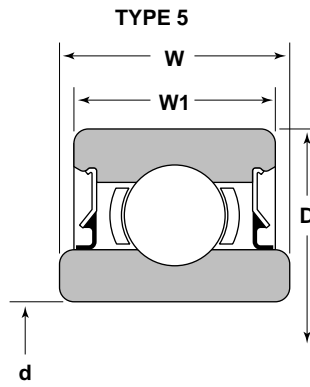
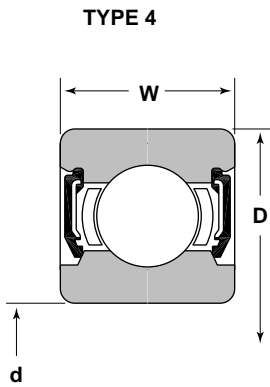
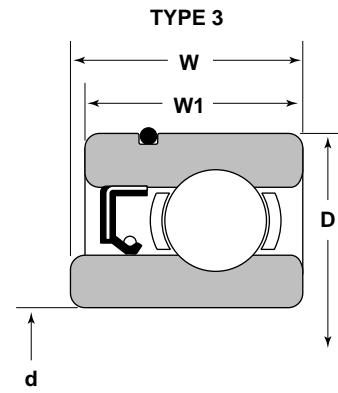
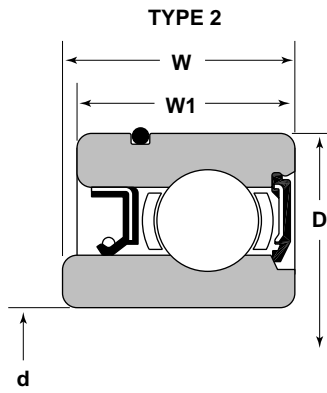
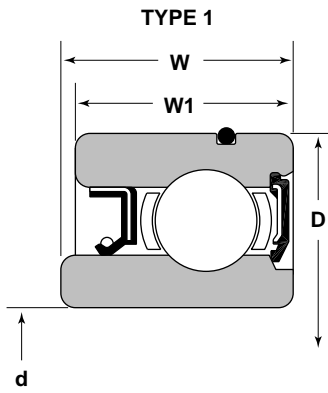
NTN-BCA® P/N	Bore	Outside Diameter	Overall Width	Inner Ring	Outer Ring
	d	D	W	W_2	W_1
	Inch				
909001N	.7498	2.0805	.7180	.6100	.5970
909002N	1.1899	2.9630	1.1500	.7750	.8700
909025N	.8435	2.2503	.8000	.6900	.6590
909026N	1.4060	3.1500	1.2260	.8510	.9170
909040N	1.2504	2.5640	.7590	.5630	.7500
909041N	.7503	1.9350	.6600	.5000	.5950
909044N	1.4995	3.1500	1.2360	.6500	.9170
909045N	.9058	2.2503	.8000	.6900	.6590
909046N	1.4995	3.1500	1.2360	.8510	.9170
909047N	.9065	2.2503	.7900	.4800	.5900
909048N	1.4995	3.1500	.9100	.6500	.7000
909052N	1.2810	2.9630	1.1500	.7700	.8700
909062N	1.3745	2.9630	1.1550	.7740	.8700
909066N	1.3745	2.9630	.7610	.5710	.6460
909067N	.7498	2.0800	.7180	.4710	.4710
909070N	1.2499	2.6500	.8100	.5160	.7010
909073N	.8435	2.2503	.8000	.4810	.5910

Front Wheel Bearings Double Row



NTN-BCA® P/N	Bore	Outside Diameter	Overall Width	Inner Ring
	d	D	W_1	W_2
Inch/mm				
5907B	1.4173 36	2.8363 —	1.3386 34	1.3386 34
5907H	1.3386 34	2.5197 64	1.4567 37	1.4567 37
5907A	1.3780 35	2.8346 72	1.3386 34	1.3386 34
5908J	1.5354 39	2.6772 68	1.4567 37	1.4567 37
5908MB	1.4961 38	2.8354 —	1.4173 36	1.2992 33
5908HA	1.4961 38	2.9150 —	1.9685 50	1.9685 50
5908BC	1.6535 42	2.9921 76	1.4961 38	1.4961 38
5907J	1.3780 35	2.8346 72	1.2992 33	1.2205 31
5907M	1.3780 35	2.5984 66	1.4567 37	1.4567 37
5908M	1.4961 38	2.8362 —	1.5748 40	1.5748 40
5908MA	1.4961 38	2.8362 —	1.3386 34	1.3386 34
5908BA	1.5748 40	3.1496 80	1.4173 36	1.3386 34
5908B	1.7323 44	3.3071 84	1.6535 42	1.5748 40
5908BB	1.5748 40	2.9937 —	1.6142 41	1.4961 38
5908BD	1.9830 —	3.2235 —	1.1000 28	1.2970 33
5908E	1.6535 40	2.9921 76	1.5748 40	1.5748 40
5908EA	1.6535 40	3.2280 —	1.4567 37	1.4567 37
5908EB	1.6535 42	2.9528 75	1.4567 37	1.4567 37
5908H	1.4961 38	2.9134 74	1.4173 36	1.2992 33
5909A	1.6929 —	3.1495 80	1.9685 50	1.9685 50
5909B	1.7323 44	3.3071 84	1.6535 42	1.6535 42

Rear Wheel Bearings Intro



Rear Wheel Bearings

Single Row Rear Wheel Bearings

NTN-BCA® P/N	Type	Bore	Outside Diameter	Overall Width	Outer Ring	Inner Ring
		d	D	W	W ₁	W ₂
Inch						
RW508FFR	5	1.5312 —	3.0623 —	.7760 —	.7760 —	.7760 —
RW507GR	4	1.4368 —	2.8900 —	.7400 —	.7000 —	.7400 —
RW508DAR	3	1.6250 —	3.1496 80	.9843 25	.8268 21	.9843 25
RW508DR	3	1.5312 —	3.1496 80	.9843 25	.8268 21	.9843 25
RW508ER	3	1.5620 —	3.1496 80	.9843 25	.8268 21	.9843 25
RW508HR	3	1.7717 45	3.1496 80	.9843 25	.8268 21	.9843 25
RW509FR	2	1.6250 —	3.2677 83	1.0236 26	1.0136 —	1.0236 26
RW607NR	1	1.3780 35	3 —	1.032 —	1 —	1.032 —
88107BYYN	7	1.3780 35	2.8346 72	.9843 25	.6693 17	.9843 25
88107AYYN4R	10	1.3780 35	2.8346 72	.9843 25	.6693 17	.9843 25
88131R	10	1.5312 —	3.2520 —	1.0252 —	.85 —	1.0252 —
88506AR	10	1.1811 30	2.4409 62	.9949 24	.6299 16	.9949 24
88506BR	10	1.1811 30	2.4409 62	.9949 24	.6299 16	.9949 24
RWP-30-YYR	5	1.1811 30	2.6722 68	.9949 24	.8268 21	.9949 24
RWF34YYR	5	1.3386 34	2.6772 68	.9949 24	.8268 21	.9949 24
RWC-35-YYR	5	1.4320 —	2.8760 —	.9300 —	.7000 —	.9300 —
206F4	8	1.1811 30	2.4409 62	.6299 16	.6299 16	.6299 16
88107JYYN		1.3780 35	2.8346 72	.6693 17	.6693 17	.6693 17
88128YYN		1.3780 35	2.8346 72	.6693 17	.6693 17	.6693 17
88128YYNR		1.3780 35	2.8346 72	.6693 17	.6693 17	.6693 17
88509YYN		1.3780 35	2.8346 72	.6693 17	.6693 17	.6693 17
88509YYN2		1.3780 35	2.8346 72	.6693 17	.6693 17	.6693 17
88107HYYNR	10	1.3780 35	2.8346 72	.6693 17	.6693 17	.6693 17
RW306FFAR	4	1.2598 32	2.8346 72	.7480 19	.7480 19	.7480 19
RW306FB	8	1.1811 30	2.8346 72	.7480 19	.7480 19	.7480 19
RW207FFJ4R	4	1.3780 35	2.8346 72	1.0200 —	.6693 17	1.0200 —
RW207YY	5	1.3780 —	2.8346 —	.8449 —	.8449 —	.8449 —
RW207YYA	5	1.3780 —	2.8346 —	.8449 —	.8449 —	.8449 —
RW207YYR	4	1.3780 35	2.8346 72	.8449 —	.8449 —	.8449 —

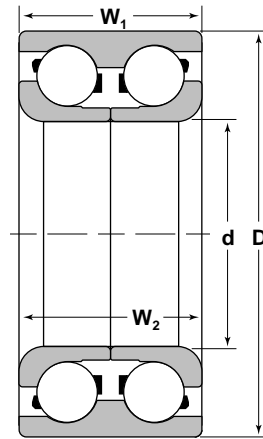
NOTE: "R" SUFFIX INCLUDES COLLAR, NO "R" SUFFIX MEANS NO COLLAR.

Rear Wheel Bearings Single Row Rear Wheel Bearings

NTN-BCA® P/N	Type	Bore	Outside Diameter	Overall Width	Outer Ring	Inner Ring
		d	D	W	W ₁	W ₂
Inch/mm						
RW307R	3	1.3780 35	3.0000 —	.9055 23	.9055 23	.9055 23
RW506AR	6	1.2500 —	2.5625 —	.7293 —	.6693 17	.7293 —
RW507CR	3	1.3780 35	2.7475 —	.7000 —	.6600 —	.7000 —
RW507EAN	2	1.3980 —	2.8346 72	.9250 —	.8858 —	.9250 —
RW507EBN	2	1.2810 —	2.8346 72	.9250 —	.9250 —	.8858 —
RW507EN	2	1.3780 35	2.8346 72	.8858 —	.8858 —	.8858 —
RW507ER	2	1.3780 35	2.8346 72	.9250 —	.8858 —	.9250 —
RW507F	3	1.3780 —	2.8346 —	.9250 —	.8858 —	.9250 —

NOTE: "R" SUFFIX INCLUDES COLLAR, NO "R" SUFFIX MEANS NO COLLAR.

Double Row Rear Wheel Bearings



NTN-BCA® P/N	Bore d	Outside Diameter D	Overall Width W	Inner Ring W ₂
	Inch/mm			
5909A	1.6929 43	3.1496 80	1.9685 50	1.9685 50