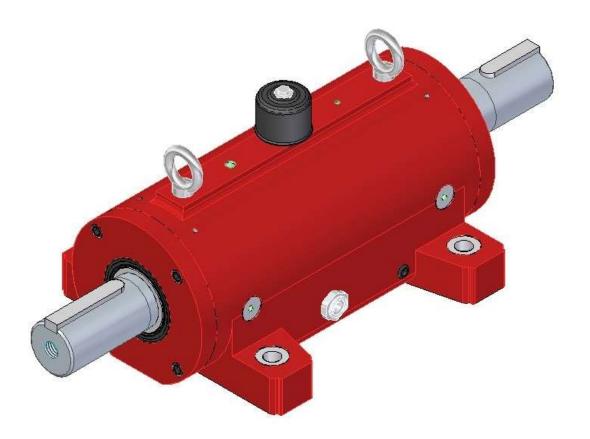
## wide range engineering

# WRB OIL BATH LUBRICATED DUAL FAN BEARING HOUSINGS FOR USE WITH MOST FAN APPLICATIONS



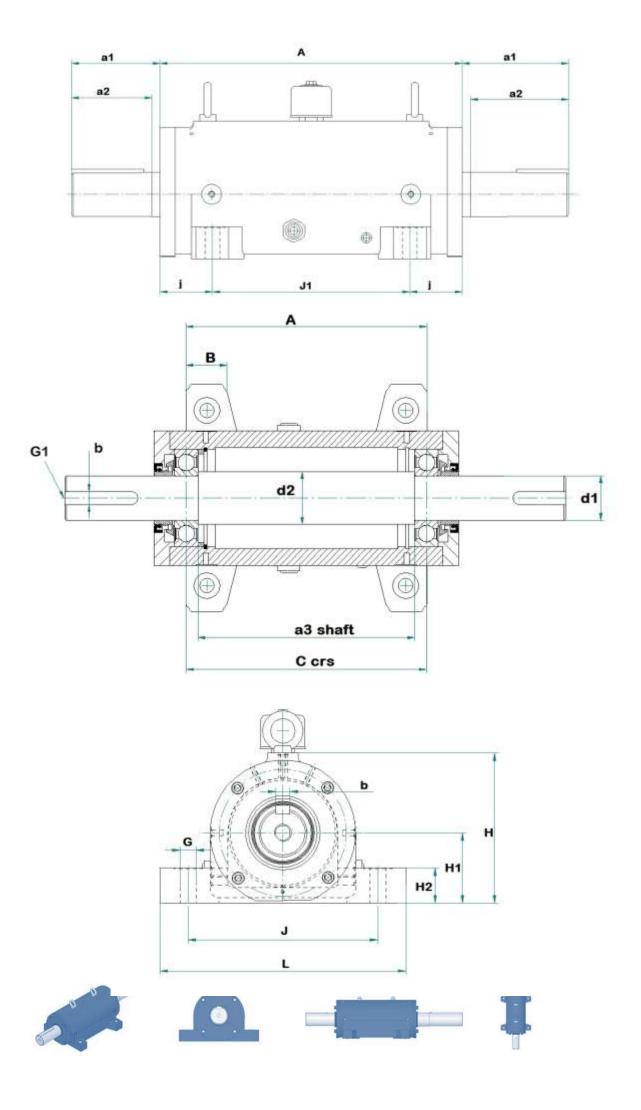
WRB Oil Bath Lubricated Dual Fan Bearing Housing











#### **Dual Bearing Housing Dimension Table**

Housing Rearing d1 d2 A L I II i H HI H2 G AI a1 a2 a3 C G1 b B Mass Max Limiting														31011	·							
Housing Designation.	Bearing	d1	d2	A	L	J	J1	j	Н	H1	H2	G	A1	a1	a2	a3	С	G1	b	В	Mass kg	Max Limiting Speed rpm
WRB 25 BB	6306 - 6306	25	40	206	175	140	130	38	105	50	30	14	162	89	83	126	153	M10	8	35	12	13000
WRB 25 RB	6306 – NU306	25	40	206	175	140	130	38	105	50	30	14	162	89	83	126	153	M10	8	35	12	12000
WRB 38 BB	6308 - 6308	38	50	252	195	159	168	42	120	60	35	14	204	109	102	164	195	M12	10	40	20	11000
WRB 38 RB	6308 – NU308	38	50	252	195	159	168	42	120	60	35	14	204	109	102	164	195	M12	10	40	20	9500
WRB 50 BB	6311 – 6311	50	65	361	270	216	245	58	166	80	40	18	305	174	167	259	296	M16	14	60	42	8000
WRB 50 RB	6311 – NU311	50	65	361	270	216	245	58	166	80	40	18	305	174	167	259	296	M16	14	60	42	7000
WRB 50 RRB	NU311 – NU311 / 6311	50	65	361	270	216	245	58	166	80	40	18	305	174	167	259	281.5	M16	14	60	42	7000
WRB 65 BB	6314 – 6314	65	85	413	310	251	279	67	200	100	50	22	350	206	197	293	336	M16	18	70	85	6300
WRB 65 RB	6314 – NU314	65	85	413	310	251	279	67	200	100	50	22	350	206	197	293	336	M16	18	70	85	5600
WRB 65 ACR	7314BG(2) – NU314	65	85	413	310	251	279	67	200	100	50	22	350	206	197	293	318.5	M16	18	70	85	5300
WRB 65 RRB	NU314 – NU314/6314	65	85	413	310	251	279	67	200	100	50	22	350	206	197	293	318.5	M16	18	70	85	5600
WRB 75 BB	6316 – 6316	75	95	466	350	286	340	63	225	112	50	22	402	235	225	338	385	M20	20	80	126	5300
WRB 75 RB	6316 – NU316	75	95	466	350	286	340	63	225	112	50	22	402	235	225	338	385	M20	20	80	126	5000
WRB 75 ACR	7316BG(2) – NU316	75	95	466	350	286	340	63	225	112	50	22	402	235	225	338	365.5	M20	20	80	126	4500
WRB 75 RRB	NU316 – NU316/6316	75	95	466	350	286	340	63	225	112	50	22	402	235	225	338	365.5	M20	20	80	126	5000
WRB 85 BB	6318 – 6318	85	105	605	350	290	460	72.5	237	112	50	22	536	250	240	445	510	M20	22	85	177	4800
WRB 85 RB	6318 – NU318	85	105	605	350	290	460	72.5	237	112	50	22	536	250	240	445	510	M20	22	85	177	4500
WRB 95 BB	6320 - 6320	95	115	668	400	320	500	84	268	130	40	25	588	270	260	502	571	M20	25	90	252	4300
WRB 95 RB	6320 - NU320	95	115	668	400	320	500	84	268	130	40	25	588	270	260	502	571	M20	25	90	252	3800
WRB 120 BB	6324 – 6324	120	135	890	500	380	700	95	310	150	50	28	830	300	290	722	793	M30	32	130	292	3400
WRB 120 RB	6324 – NU324	120	135	890	500	380	700	95	310	150	50	28	830	300	290	722	793	M30	32	130	292	3200
WRB 140 BB	6328 – 6328	140	160	900	500	420	700	100	365	185	80	35	860	400	385	705	800	M30	36	160	392	4300
WRB 140 RB	6328 – NU328	140	160	900	500	420	700	100	365	185	80	35	860	400	385	705	800	M30	36	160	392	2800
WRB 170 BB	6334 – 6334	170	195	1055	660	555	885	120	440	230	70	35	1025	400	385	946	1000	M36	40	140	485	3400
WRB 170 RB	6334 – NU334	170	195	1055	660	555	885	120	440	230	70	35	1025	400	385	946	1000	M36	40	140	485	2200
WRB 180 BB	6236 – 6236	180	210	1055	660	555	885	140	440	230	70	35	1025	400	385	869	1000	M36	45	140	593	3600
WRB 180 RB	6236 – NU236	180	210	1055	660	555	885	140	440	230	70	35	1025	400	385	869	1000	M36	45	140	593	3200
WRB 200 BB	6340 - 6340	200	235	1174	840	640	810	160	500	250	80	38	1010	350	335	930	1034	M40	45	200	692	3200
WRB 200 RB	6340 – NU340	200	235	1174	840	640	810	160	500	250	80	38	1010	350	335	930	1034	M40	45	200	692	2400
WRB 220 BB	6344 – 6344	220	250	1206	880	680	810	160	540	270	100	40	1010	350	335	930	1038	M40	50	200	794	2600
WRB 220 RB	6344 – NU344	220	250	1206	880	680	810	160	540	270	100	40	1010	350	335	930	1038	M40	50	200	794	1700

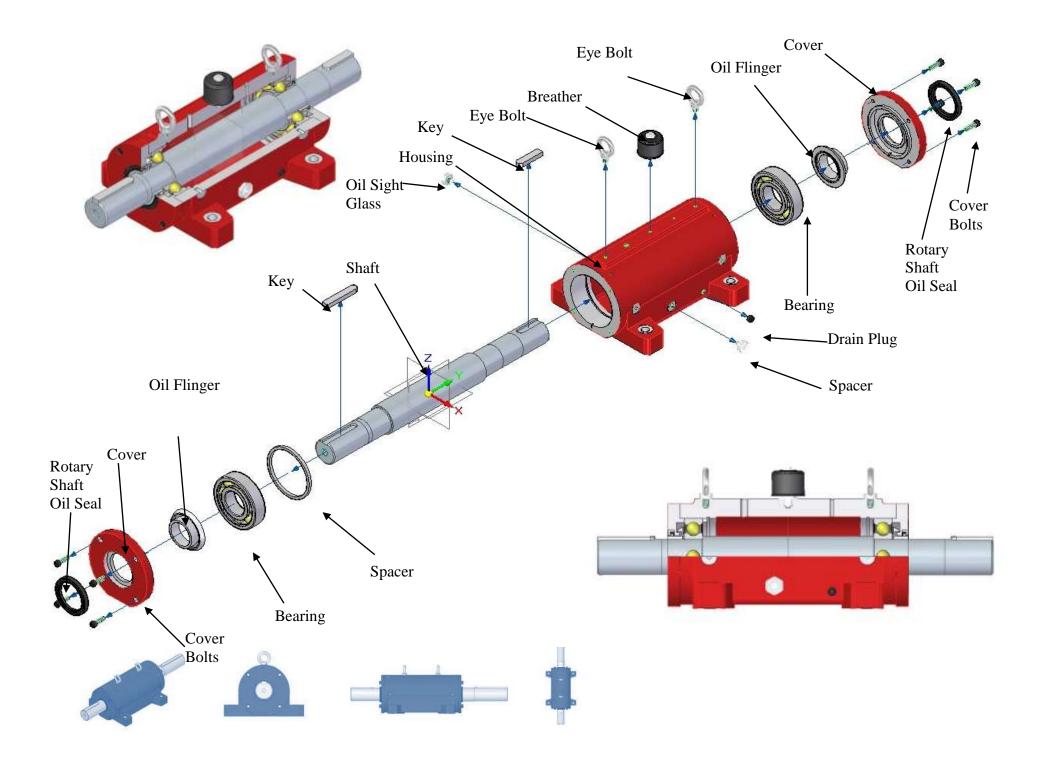
Please note: Normal operating speed should not exceed 0.8 of maximum limiting speed











#### **WRB Oil Bath Lubricated Housings**

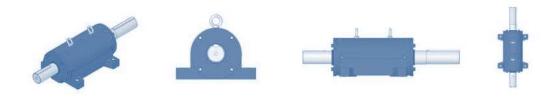
WRB Oil Bath Dual Fan Housings were originally designed for bearing arrangement of fan shafts with an overhung impeller, but is suitable for various similar applications. Generally for high speed applications.

WRB Oil Bath Dual Fan Housings are one piece housings with two bearing seats that are accurately concentric, eliminate the risk of misalignment and promotes smoother and better running accuracy.

WRB Oil Bath Dual Fan Housings are normally designed to suit two deep grove ball bearings, but other bearing arrangements like, cylindrical roller, angular contact and spherical roller bearing arrangements are also available. The variation of arrangements is literally endless.

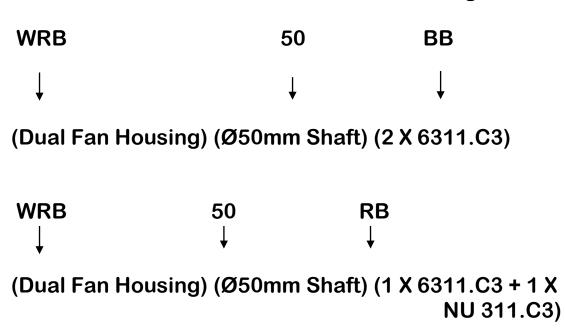
WRB Oil Bath Dual Fan Housings bolt down on to the support surface by means of four bolt holes. The covers are bolted on with cap screws or countersunk screws depending on the application. The rotation direction is indicated on the side of the housing by means of a red arrow if a Sprag Clutch (Holdback) is used.

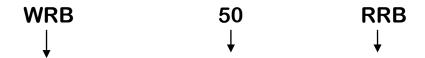
WRB Oil Bath Dual Fan Housings are also supplied as a sub assembly, all the components are supplied loose except for the shaft that is excluded. All components can be purchased separately and assembled. We however do not recommend this as we have trained qualified personnel that assemble these units every day. Units not assembled by us will have no Warrantee.



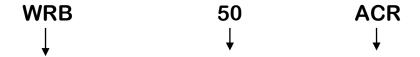
# Ordering of the WRB Oil Bath Lubricated Housings



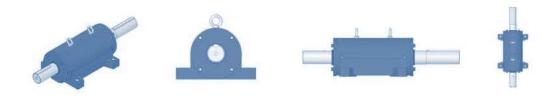




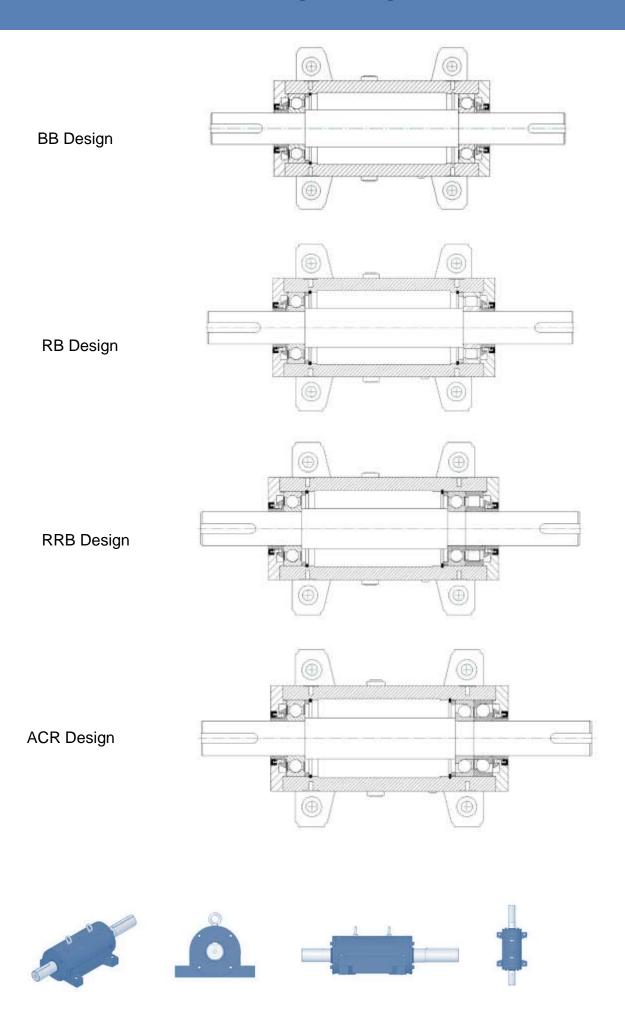
(Dual Fan Housing) (Ø50mm Shaft) (1 X 6311.C3 + 2 X NU 311.C3)



(Dual Fan Housing) (Ø50mm Shaft) (2 X 7311 + 1 X NU 311.C3)



### **Different Bearing Arrangements**



#### **WRB Oil Bath Lubricated Housing Features**

#### Interchangeability

Boundary dimensions are in accordance with most popular types, therefore, no design changes to equipment or existing drawings are necessary.

#### **Low Vibration**

The two bearing seats are concentric. Bearing misalignment is eliminated. This allows for a high degree of running accuracy and high speeds with very low vibration levels.

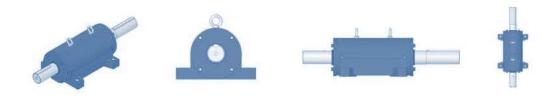
Low noise level during operation and Efficiency
The accurate alignment in the WRB Oil Bath
lubricated housing ensures quiet operation it is also
more energy efficient.

#### **Ready to Install**

All units are factory bench tested and supplied complete filled with oil and fitted with keys. The unit can be installed and run immediately. In certain cases the unit will be overfilled for transport, the oil then has to be drained to the correct level before start up.

#### Lubrication

The housing will be filled with oil on arrival. A sight glass on the side of the housing will indicate the correct oil level. A filler point and Breather is situated on the top of the housing. Please follow the oil change recommendation details supplied on the label supplied with the housing. The Label will indicate the type and amount of Oil used during assembly.



#### **WRB Oil Bath Lubricated Housing Features**

#### Sealing

The use of neoprene spring loaded lip seals running on the shaft oil flinger ensures maximum protection against the ingress of moisture and foreign matter. A deflector disk can be fitted outside the cover on the shaft to deflect any contamination during operation. A Labyrinth sealing arrangement can also be fitted for extremely dirty conditions. Grease is pumped into the Labyrinth seal to prevent any contamination from entering the seal area.

#### Easy handling and Installing

All WRB dual bearing housings are fitted with two eye bolts for safe handling. The top of the housing is milled flat and parallel with the base so that a level can be put on the top to check that the housings is mounted level. Pads on the feet are also milled for the adjusting studs once mounted.

#### **Probe Drilling**

All WRB dual bearing housings are drilled for temperature and Vibration probes on both sides of the housing for easy access. Any special drilling can be done before assembly.

#### **Painting**

As a standard all WRB dual bearing housings are supplied painted with red oxide if no paint specification is specified.

#### **Bearing Options**

Standard units i.e. type BB are fitted with two deep groove ball bearings, but options involving angular contact and roller bearings are available depending on the application.



#### **WRB Oil Bath Lubricated Housing Mounting**

#### Mounting

WRB Oil Bath housings must be mounted correctly. Using the correct tools is essential. Ensure that the base where the housing is going to be mounted on is perfectly flat and clean before mounting to avoid soft footing.

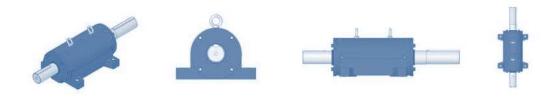
#### Mounting the WRB unit

Installing the WRB Oil Bath units is a simple operation. The unit just needs to be bolted to the support surface with four bolts. The coupling half or pulley and the impeller normally gets fitted ahead of time. When fitting the coupling half, pulley or impeller make sure that the shaft is properly supported, especially the pressing these components on the shaft to avoid damaging the bearings. Please ensure that the unit is securely fastened to the base and that the bolts are torqued to the correct Torque specifications.

Please ensure that if the unit is not installed immediately and used as a spare or stored for later installation the unit should be kept out of direct sunlight and the shaft should be rotated on a regular basis to avoid damage to the bearings and seals. A rotation roster can be obtained from WRE to ensure that this is being done on a regular basis.

If the unit is mounted correctly trouble free operation will be achieved for many years.

Mounting instructions are available on request.



#### **General Information**

#### General

The WRB Oil Bath Lubricated dual fan housing assembly incorporates a precision shaft from EN 8 as a standard. Stainless Steel, EN 9, EN 19, EN 24, EN 26 and many more variations are available on request. The housing is cast for S.G. Iron Grade 42.

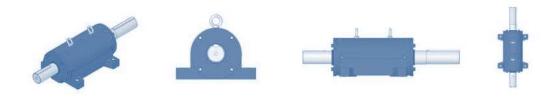
#### **Operation Surveillance**

Check the oil level on a daily basis, check bearing and vibration levels periodically. The bearings will operate at a point which depends on many factors and is difficult to calculate theoretically. However stability of temperature is more important than the level. Depending on environmental conditions, running speed and oil level, the temperature may vary slightly but it can be said that provided the temperature does not exceed 95°C the unit can be considered to be operating normally.

#### **Routine Maintenance**

We suggest that the lubricant be changed every six months for normal operating in a clean environment. For a moderate to dirty environment we recommend every three months. Please refer to the label on the housing for the lubricant type and change frequency.

Please consult WRE if doubt.



722 / I-1200 FLANGED • BND SOLID TYPE • SPA / THDS / TH / THM TAKE UP • SN / SSN / SNH / SNU / FSN / SAF / SD / SDAF / SDJC / SDG PLUMMER BLOCKS • TRUNNION MILL / BALL MILL / ROD MILL / PINION / SHEAVE WHEEL / DIFFUSER HEAD SHAFT / SHREDDER / CANE KNIFE / SHAKER SCREEN / DRAGLINE / DAVIDSON HOUSINGS • WFO OIL BATH PLUMMER BLOCK • WRB DUAL FAN GREASE & OIL LUBRICATED / VWRB VERTICAL / MAJAX / DINGLER / CODELCO • TVN HANGER • MANIFOLD SUPPORT • PRE STESS BOLTS / NUTS & STOOL • OIL INJECTION ADAPTER SLEEVES • TS LABYRINTH / TACONITE SEALS • END DISKS / LOCATING RINGS • HYDRAULIC NUTS / PUMPS & ACCESSORIES • FABRICATION OF HOUSINGS & COMPONENTS • GENERAL ENGINEERING.

#### For more information please contact us on:

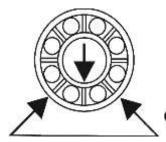
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