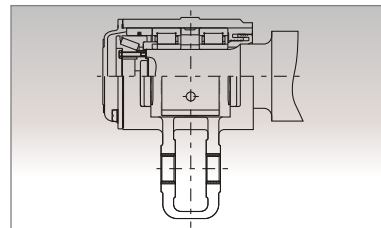


## Bearings And Axle Boxes For Electric Locomotives



Locomotives	NEI Assembly Drg.	Bearings	Bearing Dimensions (MM)		
			Bore	O. Dia.	Width
<b>Broad Gauge Locomotives</b> WAM4, WAM4A, WAG5, WAG5A WAG5C, WAG5D, WCAM1 WCG2	92-4271C  X-119 (Step Size)	L6204 & L6205  RB5043 & RB5044	150  148	270  270	80  80
<b>Broad Gauge Locomotives</b> (High Speed) WAM4, WAG5B, WCAM1	X-105  X-141 (Step Size)	RB5020 (2 Nos.) with Special Loose Lips RB5021 & RB5022  RB5062 (2 Nos.) with Special Loose Lips RB5063 & RB5064	150  148	270  270	80  80
<b>Broad Gauge Locomotives</b> (Flexi Coil Bogie) WAP1, WAP4	X-122  X-186 (Step Size)	RB5020 (2 Nos.) with Special Loose Lips RB5021 & RB5022  RB5062 (2 Nos.) with Special Loose Lips RB5063 & RB5064	150  148	270  270	80  80
<b>Broad Gauge Locomotives</b> (Freight Service) WAG7, WCM6	X-171  X-182 (Step Size)	RB5020 (2 Nos.) with Special Loose Lips RB5021 & RB5022  RB5062 (2 Nos.) with Special Loose Lips RB5063 & RB5064	150  148	270  270	80  80
<b>Broad Gauge Locomotives</b> (Passenger Service) WAP3	X-149	L6204 & L6205	150	270	80
<b>Broad Gauge Locomotives</b> (Passenger Service) WAP3, WAP6	X-180 End Axle Box  X-180 Middle Axle Box	L6204 & L6205 (End Axles)  RB5020 (2 Nos.) with Special Loose Lip RB5022 (Middle Axles)	150  150	270  270	80  80
<b>Broad Gauge Locomotives</b> WAP7 (ABB Loco) WAG9 (ABB Loco)	X-181 (with CRU Bearing)	RB5080D Double Row Cylindrical Roller Bearing Sealed Unit	150	250	160/180
<b>BHEL Locomotives</b> WCAM1 AC/DC Loco 1400 HP Loco	X-105  X-171	RB5020 (2 Nos.) with Special Loose Lips RB5021 & RB5022  RB5020 (2 Nos.) with Special Loose Lips RB5021 & RB5022	150  150	270  270	80  80
<b>Broad Gauge Locomotives</b> WAG5HB 1400 HP Loco	X-175  X-179	L6204 & L6205  RB5020 (2 Nos.) with Special Loose Lips RB5021 & RB5022	150  150	270  270	80  80

## Roller Bearings For Auxiliary Machines (Diesel Locomotives, Electric Locomotives And Passenger Coaches)

### Ball Bearings

Bearing No.	Bearing No.	Bearing No.	Bearing No.	Bearing No.	Bearing No.
6000	6200Z	6207NR	6213Z	6306N	6406
6000RS	6200ZZ	6207RSS	6213ZN	6306NR	6406N
6000RSS	6201	6207Z	6213NR	6306Z	6406NR
6000Z	6201RS	6207ZN	6213NR	6306ZZ	6408
6000ZZ	6201RSS	6207ZZ	6214	6307	6408N
6001	6201Z	6208	6215	6307N	6901
6001Z	6201ZZ	6208N	6300	6307NR	6902
6001ZZ	6202	6208NR	6300Z	6307Z	6903
6002	6202RS	6208Z	6300ZZ	6307ZN	LS10
6002LLU	6202RSS	6208ZN	6301	6307ZNR	LS11
6002Z	6202Z	6208ZZ	6301RS	6307ZZ	LS11K
6002ZZ	6202ZZ	6209	6301RSS	6308	LS12
6003	6203	6209K	6301Z	6308N	LS12-1/2
6003LLU	6203RS	6209N	6301ZZ	6308NR	LS12K
6003LU	6203RSS	6209NR	6302	6308Z	LS13
6003Z	6203Z	6209Z	6302RS	6308ZN	LS13-1/2
6004	6203ZZ	6209ZN	6302RSS	6308ZZ	LS14
6004Z	6204	6209ZZ	6302Z	6309	LS14-1/2
6004ZZ	6204N	6210	6302ZZ	6309N	LS15
6005	6204RS	6210N	6303	6309NR	LS5
6005Z	6204RSS	6210NR	6303RS	6309Z	LS7
6005ZZ	6204Z	6210Z	6303RSS	6309ZZ	LS8
6006	6204ZZ	6210ZN	6303Z	6310	LS8P
6006ZZ	6205	6210ZZ	6303ZZ	6310N	LS9
6007	6205LLU	6210ZZNR	6304	6310NR	MS10
6007RS	6205LU	6211	6304N	6310Z	MS11
6007RSS	6205N	6211K	6304RS	6310ZNR	MS12
6007Z	6205Z	6211N	6304RSS	6310ZZ	MS12-1/2
6007ZZ	6205ZZ	6211NR	6304Z	6311	MS12K
6009	6206	6211Z	6304ZZ	6311Z	MS13
6009N	6206N	6211ZN	6305	6311ZZ	MS13-1/2
6009NR	6206RS	6211ZNR	6305N	6312	MS14
6009Z	6206RSS	6211ZZ	6305RS	6312Z	MS14-1/2
6009ZZ	6206Z	6212	6305RSS	6312ZZ	MS15
6010	6206ZZ	6212N	6305Z	6313	MS7
6010ZZ	6207	6213	6305ZZ	6313RS	MS8
6200	6207N	6213N	6306	6313RSS	MS9

### Tapered Roller Bearings

Bearing No.	Bearing No.	Bearing No.	Bearing No.	Bearing No.	Bearing No.
30203	30210	32207B	32308	32008X	565AM/562M
30204	30213	32208	32309	369S/362A	566/563
30205	30214	32210	33005	418/414	575M/572A
30206	30302	32211	33019	462A/453X	580/572
30207	30305	32213	33111	482/472	683/672
30208	30312	32214	32004X	535/532A	3982/3920
30209	31309	32307	32007X	539/532X	6397/6320

### Cylindrical Roller Bearings

Bearing No.	Bearing No.	Bearing No.	Bearing No.	Bearing No.	Bearing No.
N1004	NH2210	NJ310	NUP310	NUP208E	NUP310N
NU309	NJ309	NU305	NU205E	NUP309N	RLS10
NU309E	NJ309	NU305	NU205E	NUP309N	RLS10

Meaning of Suffix	Meaning of Suffix	Meaning of Suffix
RS / LU	Bearing with single side rubber seal.	N
RSS / LLU	Bearing with both sides rubber seals.	NR
Z	Bearing with single side metal shield.	K
ZZ	Bearing with both sides metal shields.	

- Please refer our Technical Catalogue No. CATALOGUE/TC-102, JANUARY 2012 for detailed information on complete range of Ball Bearings, Cylindrical and Taper Roller Bearings.
- Always specify, required radial clearance (CN, C2, C3, C4 etc.) in your inquiries / orders. In case no radial clearance is specified, then bearings will be supplied with "Normal" (CN) class of radial clearance, as per standard practice.



## Railway Bearing Product Catalogue



flexible solutions

In technical collaboration with  
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## Bearings And Axle Boxes For Wagons



Freight Wagon	NEI Assembly Drg.	Bearings	Bearing Dimension (MM)		
			Bore	O.Dia.	Width
<b>20.3 Tonne Axle Load :</b> BOX, CRT, BCX BOXC, BOXT BOXCY, BCXC BRH-8 Wheeler BVZC	92-3965 (Old Design)	WJ130x240 & WJP130x240 P  With Special Loose Lip L5032 following old numbers may be replaced with above : L5031 & L5032	130	240	80
	M-31200 (Old Design) 1st Step	NBR-102 & NBR-101	128	240	80
	PE-1192 (Old Design) 2nd Step	RB5006 & RB5007	126	240	80
	X-134 (New Design)	WJ130x240E & WJP130x240PE  With Special Loose Lip RB5048	130	240	80
	X-135 (New Design) 1st Step	RB5056 & RB5057	128	240	80
	X-136 (New Design) 2nd Step	RB5058 & RB5059	126	240	80
<b>16.3 Tonne Axle Load :</b> TPR Tank Wagon Open Wagon  TORX TPGLR	X-110 (Old Design)	L5063 & L5064	120	220	60
	X-112 (Old Design) 1st Step	RB5001 & RB5002	118	220	60
	X-113 (Old Design) 2nd Step	RB5033 & RB5034	116	220	60
	X-138 (New Design)	L5063 & L5064	120	220	60
	X-139 (New Design) 1st Step	RB5001 & RB5002	118	220	60
	X-140 (New Design) 2nd Step	RB5033 & RB5034	116	220	60
<b>22.9 Tonne Axle Load :</b> BWTA Wagon	X-126	WJ150x300 & WJP150x300P	150	300	102
	PESD-6085 (Narrow)	AAR Standard Cartridge Tapered Roller Bearing 6x11 Class "E" with Narrow/Wide Jaw Adapter	144.5	220.6	163.5
BOXN, BCN, BTPN, BOBRN, etc. with CASNUB Bogie	PESD-6086 (Wide)				
<b>14 Tonne Axle Load (MG Wagon)</b> Cast Steel Bogie	X-168	RB5075 & RB5076	119.1	215	60
	FRICON Bogie	X-169	RB5075 & RB5076	119.1	215

## Bearings For Passenger Coaches



Passenger Coach	Type	Bearings	Bearing Dimension (MM)		
			Bore	O. Dia.	Width
ICF Coaches	(a) ICF Design MG	22320	100	215	73
	(b) ICF Design BG	22326	130	280	93
JESSOP Coaches	(a) ICF Design MG	22320	100	215	73
	(b) ICF Design BG	22326	130	280	93
ELECTRIC MULTIPLE UNITS (EMU)	(a) MG Trailer	22320	100	215	73
	(b) BG Trailer	22326	130	280	93
	(c) BG Motor Coach	22328	140	300	102
BEML Coaches	(a) ICF Design BG	22326	130	280	93
LHB Coaches	(b) MAN Design BG PE-1179	WJ120x240 & WJP120x240P	120	240	80
		UIC130x230	130	230	160

## Traction Motor Bearings

Traction Motor	Location	NEI Drg.	Bearing	Bearing Dimensions (MM)		
				Bore	O.D.	With
TM4301, TM4601, TM4303 TM4605, 253-BX	Commutator End	PE-1842	NUP318	90	190	43
TM3702, TM5002AZ, TAO-659	Commutator End	PESD-3598	NH318 (Rivetless Cage)	90	190	43
TM3702, TM5002AZ, TAO-659	Commutator End	PE-1895	NH318	90	190	43
TM4906, TM4939, 165M, GE-752	Commutator End	PESD-3477	NH320 (Rivetless Cage)	100	215	47
TM4906, TM4939, 165M, GE-752	Commutator End	PE-1845	NH320	100	215	47
TG10931AZ & TG10919AZ	Commutator End	PE-2626	NH324	120	260	55
HS15250A, HS1050						
TM4601, TM4603, TM4605	Pinion End	PE-1627	NU326	130	280	58
TM4606, MB3080, 253-BX						
TM4906, TM4939, 165M, GE-752	Pinion End	PE-1847	NU330 (Riveted)	150	320	65
TG10931AZ & TG10919AZ	Pinion End	PE-3324	NU330 (Rivetless Cage)	150	320	65
TM4906, TM4939, 165M, GE-752						

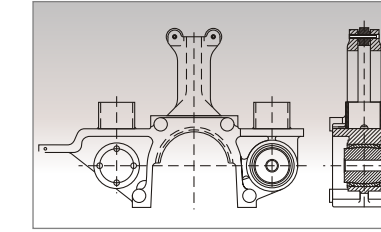
## Traction Motor Suspension Unit Bearings

Traction Motor	Location	NEI Drg.	Bearings	Bearing Dimensions (MM)		
				Bore	O.D.	With
HS15250A, HS1050, TM4906	Drive End	PESD-5061	M249747 / M249710	257.175	358.775	71.438
	Non Drive End	PESD-5062	M349547 / M349510	255.6	342.9	57.15
6FRA6068 (WAG9)	Drive End	PESD-3454	NU1964	320	440	56
	Non Drive End	PESD-3453	NH1044	220	340	56
MSU for WDG4	Drive End	PESD-5068	N1059 / M244210	221.17	314.325	61.912
	Non Drive End	PESD-5069	M244249A / N1060	220.662	314.325	61.912

## Suspension Tube

Suspension Tube GM Locomotive	Housing Bearing Kit to GM Part No. K-1745037 and DLW Part No. 17454499
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## Bearings And Axle Boxes For Diesel Electric Locomotives



Locomotives	NEI Assembly Drg.	Bearings	Bearing Dimensions (MM)		
			Bore	O. Dia.	Width
<b>Broad Gauge Locomotives</b> WDM2, WDM2A, WDM2B, WDS5 WDS6, WDS8	92-4271C	L6204 & L6205	150	270	80
	X-119 (Step Size)	RB5043 & RB5044	148	270	80
<b>Broad Gauge Locomotives</b> (High Speed) WDM2C, WDM3A, WDM7	X-105	RB5020 (2 Nos.) with Special Loose Lips RB5021 & RB5022	150	270	80
	X-141 (Step Size)	RB5062 (2 Nos.) with Special Loose Lips RB5063 & RB5064	148	270	80
WDM3A	X-197 (with CRU bearing)	RB5081D-E (End Axle) RB5081D-M (Middle Axle)	150	270	174/215
<b>Broad Gauge Locomotives</b> (Freight Service) WDG3A, WDG3B, WDM3D, WDG2	X-171	RB5020 (2 Nos.) with Special Loose Lips RB5021 & RB5022	150	270	80
	X-182 (Step Size)	RB5062 (2 Nos.) with Special Loose Lips RB5063 & RB5064	148	270	80
<b>Broad Gauge Locomotives</b> (Passenger Service) WDP1	X-174	RB5020 (2 Nos.) with Special Loose Lip RB5021	150	270	80
	<b>Broad Gauge Locomotives</b> (Passenger Service) WDP2, WDP3A	X-180 End Axle Box X-180 Middle Axle Box	L6204 & L6205 (End Axles) RB5020 (2 Nos.) with Special Loose Lip RB5022 (Middle Axles)	150	270
<b>Broad Gauge Locomotives</b> WDG4 (EMD GT-46MAC)	BP-202214	Cartridge Tapered Roller Bearing 6 1/2x12 Class "F"	157.15	252.413	184.2 Cup 273.1 Total
	WDP4 (EMD GT-46PAC)	X-190	Adapter Assembly		
<b>Broad Gauge Locomotives</b> WDG3A & WDM3D	X-198 (with CRU bearing)	RB5081D-E (End Axle) RB5081D-M (Middle Axle)	150	270	174/215
	X-192	RB5020 (2 Nos.) with Special Loose Lips RB5021 & RB5022	150	270	80
<b>Broad Gauge Locomotives</b> WDM3D, WDM3E WDM3F	92-4253	L6179 & L6180	120	215	60
	<b>Meter Gauge Locomotives</b> YDM4, YDM4A	X-151 (Step Size)	RB5069 & RB5070	118	215
<b>Narrow Gauge Locomotives</b> ZDM4	X-158	WJ100x200 & WU100x200W	100	200	67
	<b>Broad Gauge Shunter</b> WDS3 (Non floating type leading, inter trailing wheel)	92-4204	L6019 (2 Nos.)	200	360
<b>Broad Gauge Shunter</b> WDS4 (Floating type)	92-4277A	L6207 (1-Set)	200	360	236
<b>DLW's Export Locomotives</b> Sri Lankan Railways (SL3200WB) M8A Loco (Sri Lankan Railways) Malaysian Railways (Cape / MG) 2300 HP CAPE Gauge Diesel Electric Locomotives	X-187	RB5020 (2 Nos.) with Special Loose Lips RB5021 & RB5022	150	270	80
	X-205				
	X-188				
	X-194				
Vietnam Railways	X-189	(Axle Box & Components Only)			
<b>Broad Gauge Locomotives</b> WDM2 Axle Wheel	PESD-5072	74555/74555D/74849XD	139.7	215.9	137.324/ 212.724