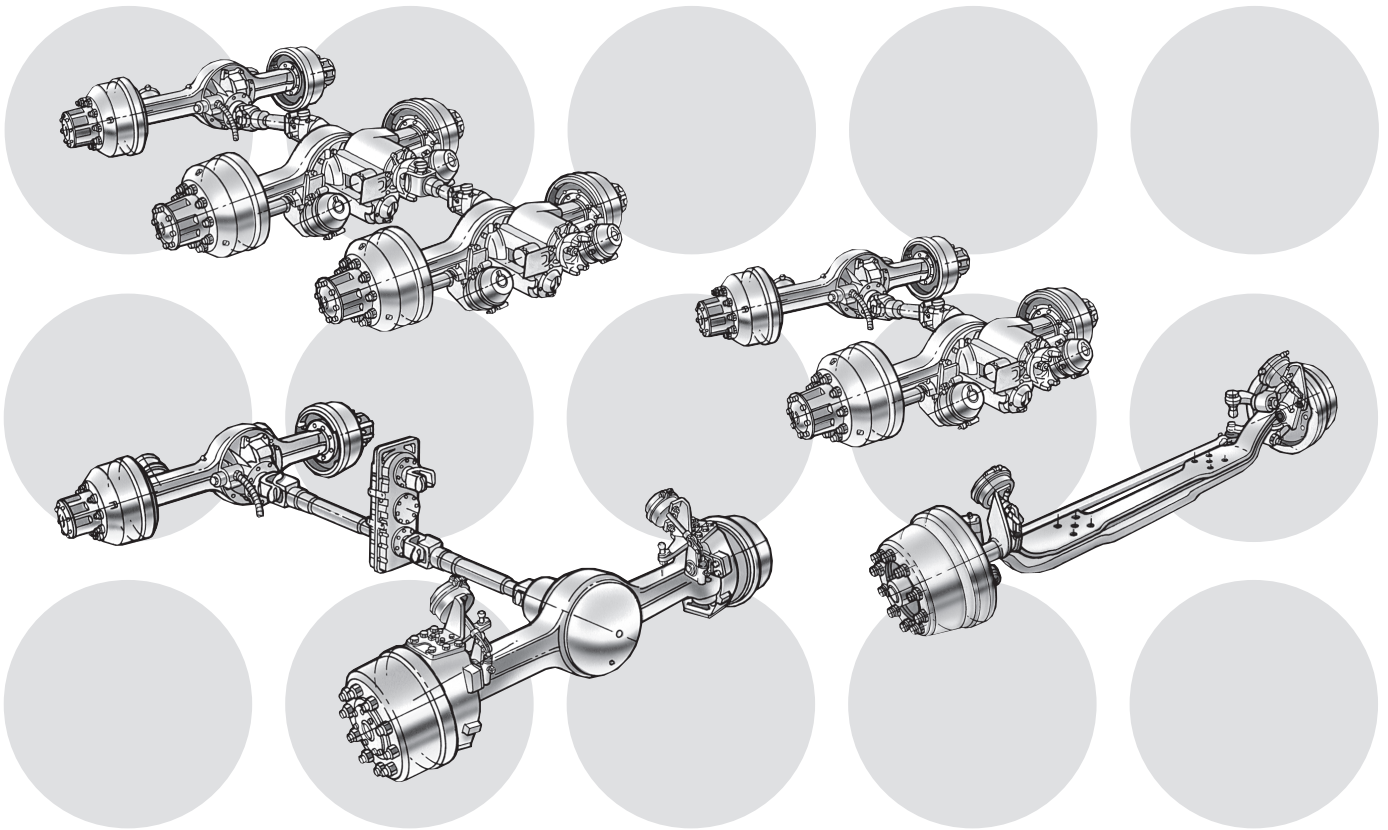


Component Reference Guide TP-7824

# Truck and Tractor Axle Specifications

Revised 07-06



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## Truck and Tractor Axle, Brake and Transfer Case Applications and Ratings

The permitted use of axles, brakes, transfer cases and other components, including the capacity ratings that are shown, vary with application and service. Applications and installation must be approved by ArvinMeritor's engineering departments.

Failure to gain applications approval, or use of componentry in non-approved applications can void ArvinMeritor's warranty coverage. Refer to publication TP-9441, Axle Application Guidelines, for vocational guidelines on axle applications. Products not listed are not approvable in rescue applications.

Variations in tire size, transmissions, engine power and torque, duty cycle and route terrain affect application approvals. All ratios are not necessarily approvable for the Gross Axle Weight (GAW) and Gross Combination Weight (GCW) limits listed.

For information about other ArvinMeritor components, contact your ArvinMeritor representative or call ArvinMeritor's Customer Service Center at 800-535-5560. You can also access this and other ArvinMeritor publications by visiting Literature on Demand at [meritorhvs.com](http://meritorhvs.com).

### Model Nomenclature

New Front Non-Drive Axle . . . . .	1
Current Non-Drive . . . . .	2
New Drive Axle . . . . .	3
Current Drive Axle . . . . .	4
Transfer Case . . . . .	5

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### Single Rear Axles

Hypoid Single-Reduction . . . . .	9
Hypoid Planetary Two-Speed . . . . .	12
Helical-Hypoid Double-Reduction . . . . .	12

### Tandem Axles

Hypoid Single-Reduction . . . . .	13
Helical-Hypoid Double-Reduction . . . . .	15

### Tridem Axles

Hypoid Single-Reduction . . . . .	16
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### Transfer Cases

Single-Speed . . . . .	17
Two-Speed . . . . .	18

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**Hub, Tie Rod Arm, Brake Attachment Variation**

- A = Conventional, Non-Integral Tie Rod Arm, Non-Integral Brake
- B = Conventional, Integral Tie Rod Arm, Non-Integral Brake
- C = Conventional, Integral Tie Rod Arm, Integral Disc Brake
- D = Unitized 65 mm, Integral Tie Rod Arm, Integral Drum Brake
- E = Conventional, Integral Tie Rod Arm, Integral Drum Brake
- F = Unitized 60 mm, Non-Integral Tie Rod Arm, Non-Integral Brake
- G = Unitized 60 mm, Integral Tie Rod Arm, Integral Drum Brake
- H = Unitized 60 mm, Integral Tie Rod Arm, Integral Disc Brake

KPI in.	(mm)	Drop in. (mm)	KPI in.	(mm)	Drop in. (mm)
13	= 68.0 (1727.2)	3.7 ( 95.0)	53	= 72.0 (1828.8)	3.7 ( 95.0)
16	= 68.0 (1727.2)	3.6 ( 91.4)	55	= 75.8 (1924.1)	6.5 (165.1)
21	= 69.0 (1752.6)	3.3 ( 83.8)	62	= 65.2 (1657.1)	3.7 ( 95.0)
22	= 69.0 (1752.6)	3.5 ( 88.9)	63	= 65.3 (1657.4)	3.7 ( 95.0)
23	= 69.0 (1752.6)	3.5/2.0 ( 88.9/50.8)	67	= 74.5 (1892.3)	8.0 (203.2)
24	= 69.0 (1752.6)	5.0 (127.0)	70	= 74.5 (1892.3)	3.6 ( 91.4)
30	= 70.4 (1788.2)	10.2 (258.1)	75	= 80.0 (2032.0)	2.5 ( 63.5)
33	= 71.0 (1803.4)	3.7 ( 95.0)	85	= 67.5 (1714.5)	2.5 ( 63.5)
40	= 71.5 (1816.1)	4.7 (118.1)	86	= 67.5 (1714.5)	3.6 ( 91.4)
43	= 71.5 (1816.1)	3.7 ( 95.0)	92	= 68.5 (1739.9)	3.5 ( 88.9)
44	= 71.5 (1816.1)	5.0 (127.0)	94	= 68.5 (1739.9)	5.0 (127.0)
51	= 72.0 (1828.8)	3.3 ( 83.8)			

**Manufacturing Location**

- N = N.A.
- S = S.A.
- E = Europe
- A = Australia/Asia

**M F S - xx - x x x x - x x - xxx**  
**M F S - 1 2 - 1 2 2 A - N L - 1**

**M = Meritor**

**F = Front**

**S = Non-Drive Steer Axle**

**GAWR Pounds or Tons**

**Axle Spec. Number**

**Beam, King Pin, Bushing Variation**

- 1 = Forged I-Beam, Straight King Pins – Non-Metallic Bushings
- 2 = Forged I-Beam, Tapered King Pins – Needle Bearings
- 4 = Forged I-Beam, Straight King Pins – Bronze Bushings
- 5 = Forged I-Beam, Straight King Pins – Needle Bearings
- 6 = Formed Beam, Straight King Pins – Non-Metallic Bushings

**Brake Type**

- B = "B" Frame Brake
- C = Air Disc Brake
- D = Wedge Brake (Dual Air Chambers)
- E = Wedge Brake (Dual Hydraulic Cylinders)
- F = Wedge Brake (Single Hydraulic Cylinder)
- G = DuraPark® Hydraulic Drum
- H = Quadraulic™ Disc
- K = DiscPlus™ Air Disc
- L = Q Plus™ Cam Brake
- N = None
- P = "P" Series Cam Brake
- Q = "Q" Series Cam Brake
- R = Cast Plus™ Brake
- S = Wedge Brake (Single Air Chamber)
- T = "T" Series Cam Brake
- V = Simplex Air Cam Brake
- W = "W" Series Cam Brake
- Z = Non-Meritor Brake

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For the latest nomenclature, refer to Publication SP-20200, Meritor Front Non-Drive Steer Axles and Drive Axles: Model Nomenclature. To obtain this publication, call ArvinMeritor's Customer Service Center at 800-535-5560, or visit Literature on Demand at meritorhvs.com.

# Current Non-Drive Model Nomenclature

**MERITOR®**

**BASIC CAPACITY**

C = 7,000-8,000 lbs. (3175-3629 kg)  
 D = 10,000 lbs. (4536 kg)  
 F = 12,000-13,200 lbs. (5443-5987 kg)  
 G = 14,600 lbs. (6623 kg)  
 L = 16,000-20,000 lbs. (7258-9072 kg)

**BRAKE TYPE**

CA = Dura-Master® Air Disc Brake  
 L = Q Plus™ Cam Brake  
 N = None  
 P = Cam-Master® "P" Series Cam Brake  
 Q = Cam-Master® "Q" Series Cam Brake  
 T = Cam-Master® "T" Series Cam Brake  
 W = Cam-Master® "W" Series Cam Brake  
 Z = Non-Meritor Brake  
 RDA = Stopmaster® Wedge Brake  
 (Dual Air Chambers)  
 RSA = Stopmaster® Wedge Brake  
 (Single Air Chamber)  
 RDH = Stopmaster® Wedge Brake  
 (Dual Hydraulic Cylinders)  
 RSH = Stopmaster® Wedge Brake  
 (Single Hydraulic Cylinder)

**F x - x x x - x x - x x x**  
 F F - 9 6 1 - L X - 2 2 1

**FRONT  
AXLE**

**SPECIFICATION  
NUMBER**

**BASIC  
SERIES**

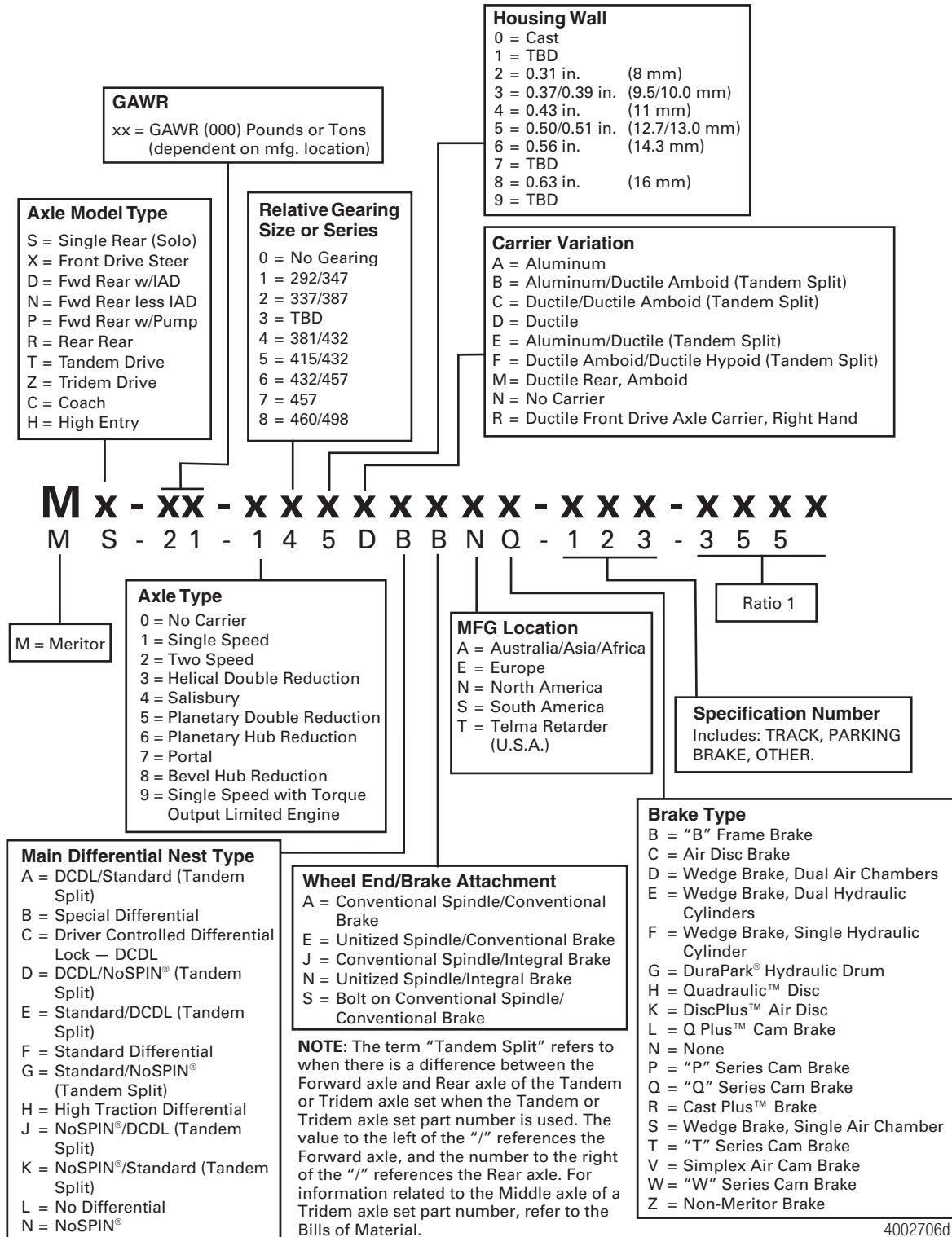
**MAJOR VARIATION**

0 = Pre-FMVSS-121 Design  
 1 = Straight Sealed King Pin and New Tie Rod Assembly  
 2 = Sealed King Pin Construction  
 3 = Larger Axle Beam and Knuckles  
 4 = Easy Steer® Design  
 5 = Tubular Axle Beam  
 6 = Lightweight Axle Beam  
 7 = Center-Point™ Design  
 8 = Easy Steer Plus™ Unitized Axle Design  
 9 = Needle Bearings

**NUMBER DESIGN VARIATION**

0 = Tapered King Pin  
 1 = Straight King Pin  
 2 = Special Tie Rods  
 3 = 5-Inch Drop from Center of Spindle to Pad  
 4 = 5-Inch Drop from Center of Spindle to Pad and Special Tie Rods  
 5 = Special Wheel-Ends  
 6 = Double Drop Beam — 12,000 lbs. GAW  
 7 = Double Drop Beam — 13,200 lbs. GAW

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For the latest nomenclature, refer to Publication SP-20200, Meritor Front Non-Drive Steer Axles and Drive Axles: Model Nomenclature, on ArvinMeritor's website at arvinmeritor.com.

# Current Drive Axle Model Nomenclature

**MERITOR®**

**GEARING TYPE**

- 1 = Single Speed
- 2 = Two Speed
- 3 = Helical Double-Reduction
- 4 = Salisbury Single Speed
- 5 = Planetary Double-Reduction
- 6 = Hub Reduction

**MAIN DIFFERENTIAL NEST TYPE**

- A = DCDL/Standard (Tandem Split)
- B = Special Differential
- C = Driver Controlled Differential Lock — DCDL
- D = DCDL/NoSPIN® (Tandem Split)
- E = Standard/DCDL (Tandem Split)
- F = Standard Differential
- G = Standard/NoSPIN® (Tandem Split)
- H = High Traction Differential
- J = NoSPIN®/DCDL (Tandem Split)
- K = NoSPIN®/Standard (Tandem Split)
- L = No Differential
- N = NoSPIN®

**BRAKE TYPE**

- B = "B" Frame Brake
- C = Air Disc Brake
- D = Wedge Brake (Dual Air Chambers)
- E = Wedge Brake (Dual Hydraulic Cylinders)
- F = Wedge Brake (Single Hydraulic Cylinder)
- G = DuraPark® Hydraulic Drum
- H = Quadraulic™ Disc
- K = DiscPlus™ Air Disc
- L = Q Plus™ Cam Brake
- N = None
- P = "P" Series Cam Brake
- Q = "Q" Series Cam Brake
- R = Cast Plus™ Brake
- S = Wedge Brake (Single Air Chamber)
- T = "T" Series Cam Brake
- V = Simplex Air Cam Brake
- W = "W" Series Cam Brake
- Z = Non-Meritor Brake

**NOMINAL AXLE LOAD RATING (GAWR)**

In thousands of pounds. Individual forward and rear axles of a tandem set (D, N, P, R) are rated as single axles. A tandem set (T) is rated as the combination of the two axles and a tridem set (Z) as the combination of the three axles.

**MANUFACTURING LOCATION**

- A = Australia
- B = Brazil
- C = India
- D = Mexico
- E = Europe
- N = U.S.A.
- T = Telma Retarder (U.S.A.)

**AXLE SPECIFICATION NUMBER**

Identifies specific customer axle configurations (variations from the original axle design). For information about the variation, refer to the Bill of Materials for that specific axle model.

Meritor **R x - x x - x x x x x x - x x x**  
 R R - 2 0 - 1 4 5 N F N N - 1 5 4

**AXLE TYPE**

- C = Single Rear Drive Axle, Coach
- D = Forward-Rear Axle of a Drive Tandem with Inter-Axle Differential
- F = Front Drive Axle
- H = High Entry
- N = Forward-Rear Axle of a Drive Tandem or Tridem without Inter-Axle Differential
- P = Forward-Rear Axle of a Drive Tandem with Inter-Axle Differential and Pump
- R = Rear-Rear Axle of a Drive Tandem
- S = Single Rear Drive Axle
- T = Tandem Drive Axle Set
- Z = Tridem Drive Axle Set

**HUB TYPE**

- A = Aluminum
- C = Cast Spoke Wheel
- F = Ferrous
- N = None

\*NOTE: This position will be used to designate hub only until more than three digits are required to designate axle specification.

**AXLE DESIGN VARIATION**

Indicates axle design level or variation, (e.g., RS 23 161 has a thicker wall housing than the RS 23 160). For information, refer to the Bill of Materials for that specific axle model. (Also refer to Tridem Axle Note 2 below.)

**CARRIER TYPE**

Carrier size. Larger numbers indicate a higher GCW rated carrier; i.e., larger ring gear, etc. (Also refer to Tridem Axle Note 2 below)

NOTE 1: If a complete axle designation is not required, use the first seven positions of the model designation to identify the basic axle model.

**RS 17 145** = Single Rear Drive, 17,000 lbs., Single Speed, 15" Ring Gear, 145 Carrier Model.

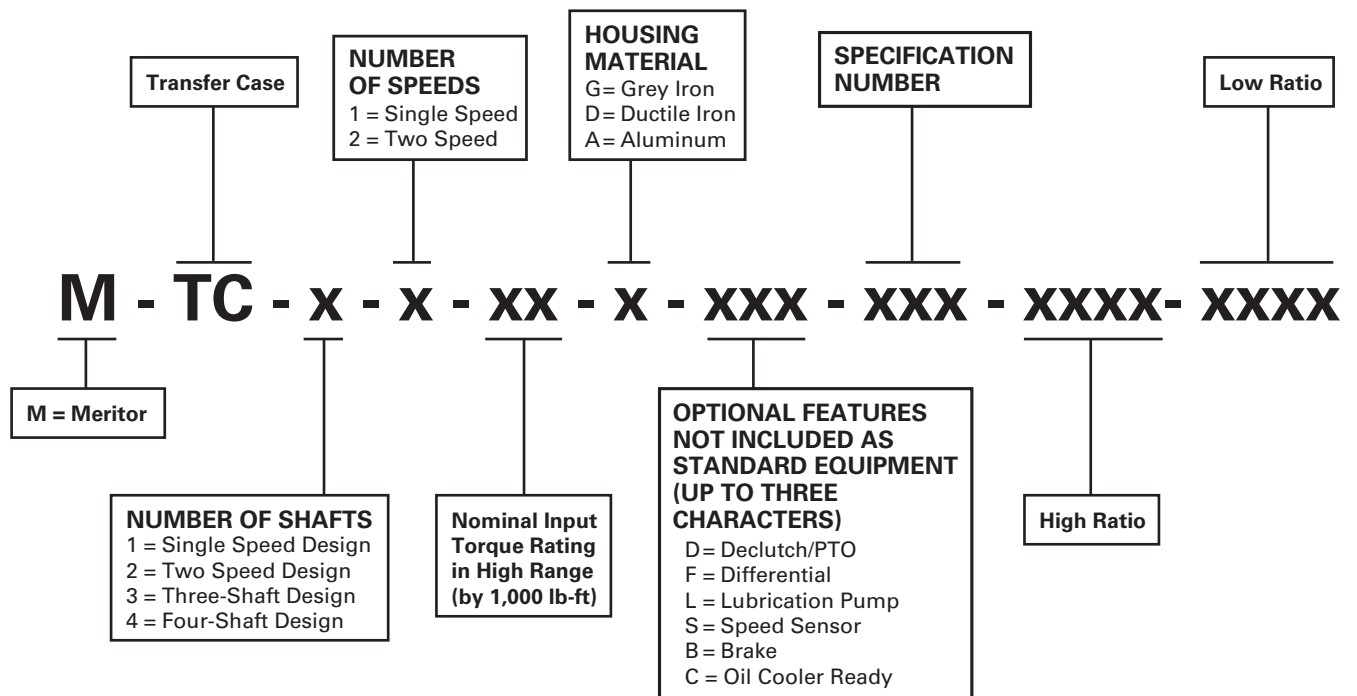
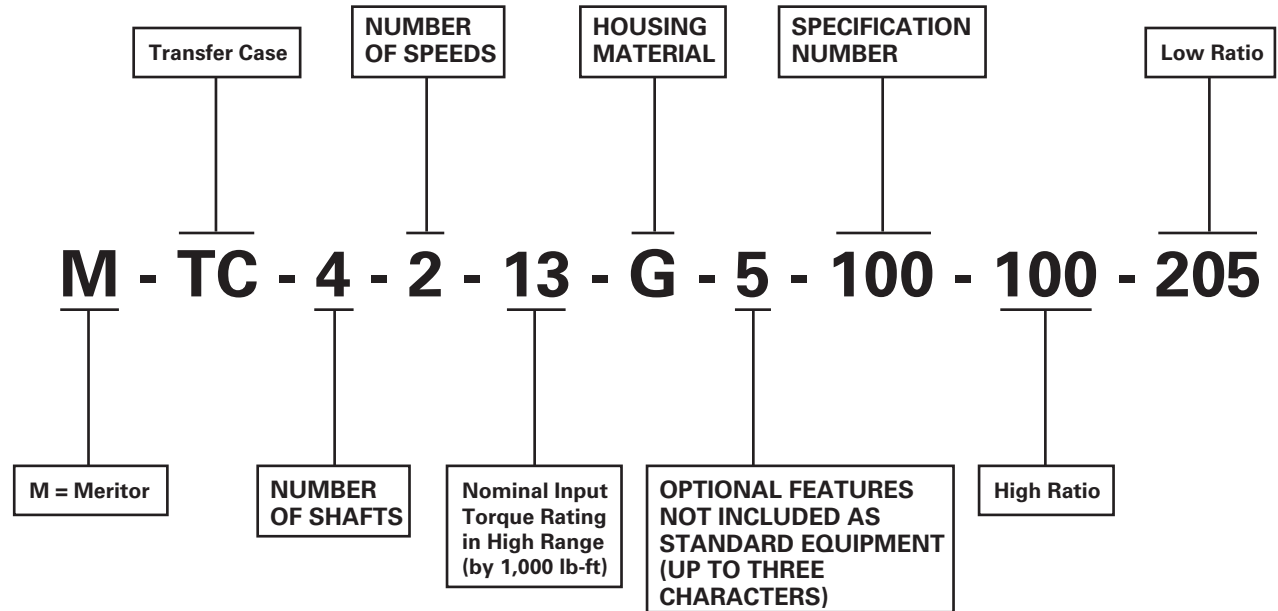
**RT 52 380** = Tandem Drive Axle Set, 52,000 lbs., Helical Double-Reduction, 19.62" Ring Rear, 380 Carrier Model.

**RZ 60 164** = Tridem Drive Axle Set, 60,000 lbs., Single Speed, Includes a 160 Series Forward Rear or First Axle and a 145 Series Tandem Axle Set as the Second and Third Axles.

NOTE 2, FOR TRIDEM AXLES ONLY:  
 For a Tridem Drive Axle Set (RZ), the number in the sixth position designates the carrier in the first axle. The number in the seventh position designates the carriers in the second and third axles.

NOTE 3: The term "Tandem Split" refers to when there is a difference between the Forward axle and Rear axle of the Tandem or Tridem axle set when the Tandem or Tridem axle set part number is used. The value to the left of the "/" references the Forward axle, and the number to the right of the "/" references the Rear axle. For information related to the Middle axle of a Tridem axle set part number, refer to the Bills of Material.

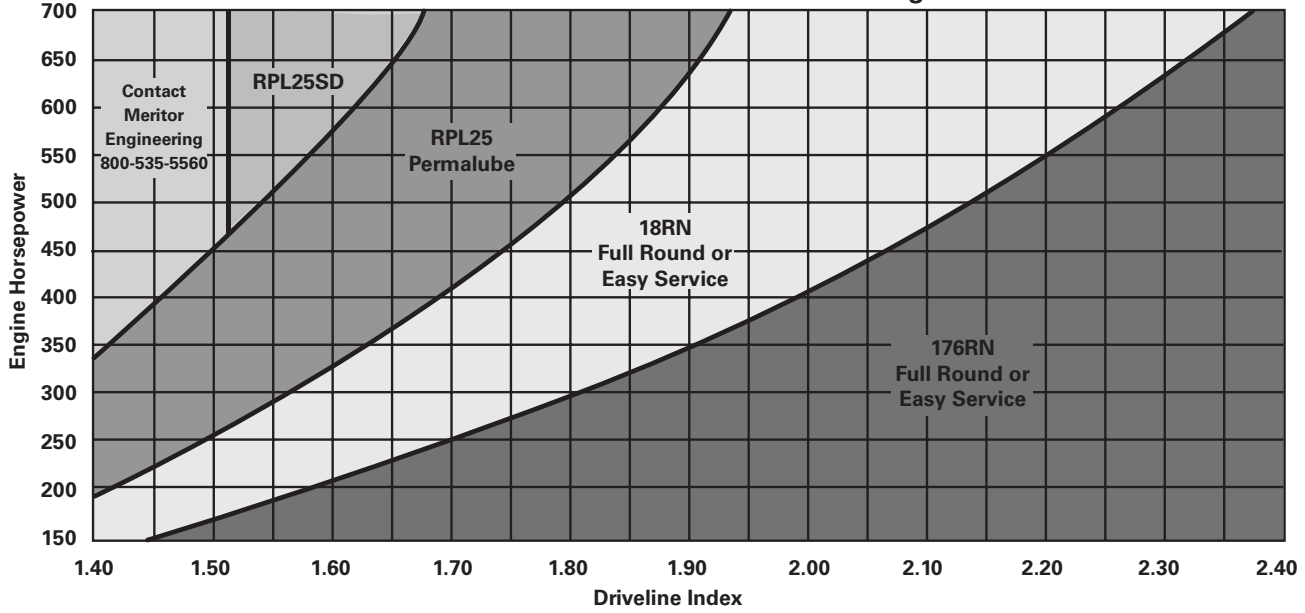
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### Driveline Specification Guidelines

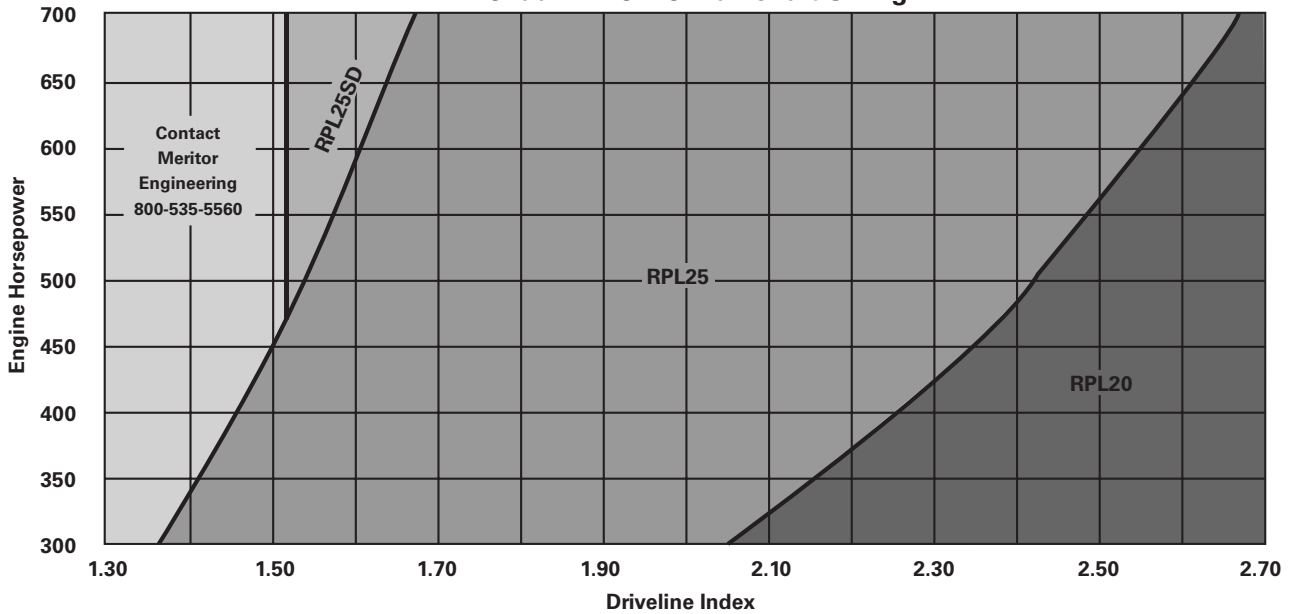
#### RN Series Drivelines – Greaseable Linehaul Driveline Mainshaft Sizing



Driveline Index =  $\frac{\text{Axle Ratio} \times 1,000,000}{(\text{GCW}) \times (\text{SLR})}$  Key: SLR = Static Loaded Radius of Tires (Inches)  
 GCW = Gross Combination Weight (Pounds)

### Driveline Specification Guidelines

#### RPL Series Drivelines – Permalube Linehaul Driveline Mainshaft Sizing



Driveline Index =  $\frac{\text{Axle Ratio} \times 1,000,000}{(\text{GCW}) \times (\text{SLR})}$  Key: SLR = Static Loaded Radius of Tires (Inches)  
 GCW = Gross Combination Weight (Pounds)



Rating Pounds (kg)	Axle Beam Drop Inches (mm)	(KPI) King Pin Intersection Inches (mm)	Wheel-End Series	Axle Model
6,000 (2724)	3.30 (83.8)	72 (1828.8)	A	MFS-6-151A-N
6,000 (2724)	3.74 (95.0)	72 (1828.8)	B	MFS-6-153B-N
6,000 (2724)	3.74 (95.0)	72 (1828.8)	C	MFS-6-153C-N
6,000 (2724)	3.74 (95.0)	65.25 (1657.4)	B	MFS-6-162B-N
6,000 (2724)	3.74 (95.0)	65.25 (1657.4)	C	MFS-6-162C-N
7,000 (3178)	3.74 (95.0)	68 (1727.2)	C	MFS-7-113C-N
7,000 (3178)	3.74 (95.0)	72 (1828.8)	C	MFS-7-153C-N
7,000 (3178)	3.74 (95.0)	65.25 (1657.4)	C	MFS-7-163C-N
8,000 (3632)	3.74 (95.0)	68 (1727.2)	B	MFS-8-113B-N
8,000 (3632)	3.74 (95.0)	72 (1828.8)	B	MFS-8-153B-N
8,000 (3632)	3.74 (95.0)	65.25 (1657.4)	B	MFS-8-163B-N
8,000 (3632)	3.60 (91.4)	68 (1727.2)	A	FC-941
8,000 (3632)	3.50 (88.9)	69 (1752.6)	A	FC-965
10,000 (4540)	3.50 (88.9)	69 (1752.6)	A	FD-965
10,000 (4540)	3.74 (95.0)	71.5 (1816.1)	A	MFS-10-143A-N
10,000 (4540)	5.00 (127.0)	71.5 (1816.1)	A	MFS-10-144A-N
12,000 (5448)	3.74 (95.0)	71.5 (1816.1)	A	MFS-12-143A-N
12,000 (5448)	5.00 (127.0)	71.5 (1816.1)	A	MFS-12-144A-N
12,000 (5448)	3.50 (88.9)	69 (1752.6)	A	FF-941
12,000 (5448)	5.00 (127.0)	69 (1752.6)	A	FF-943
12,000 (5448)	3.50 (88.9)	69 (1752.6)	A	FF-961
12,000 (5448)	3.5/2.0 (88.9/51.0)	69 (1752.6)	A	FF-966
13,200 (5993)	3.5/2.0 (88.9/51.0)	69 (1752.6)	A	FF-967
13,200 (5993)	3.50 (88.9)	69 (1752.6)	A	FF-942
13,200 (5993)	5.00 (127.0)	69 (1752.6)	A	FF-944
13,200 (5993)	3.74 (95.0)	71.5 (1816.1)	A	MFS-13-143A-N
13,200 (5993)	5.00 (127.0)	71.5 (1816.1)	A	MFS-13-144A-N
14,600 (6628)	3.50 (88.9)	69 (1752.6)	A	FG-941
14,600 (6628)	5.00 (127.0)	69 (1752.6)	A	FG-943
14,700 (6674)	3.74 (95.0)	71.5 (1816.1)	A	MFS-14-143A-N
14,700 (6674)	5.00 (127.0)	71.5 (1816.1)	A	MFS-14-144A-N
16,000 (7264)	3.74 (95.0)	71.5 (1816.1)	A	MFS-16-143A-N
16,000 (7264)	3.50 (88.9)	69 (1752.6)	A	MFS-16-122A-N
16,000 (7264)	3.50 (88.9)	68.5 (1739.9)	A	FL-941
16,000 (7264)	5.00 (127.0)	68.83 (1748.3)	A	FL-943

Rating Pounds (kg)	Axle Beam Drop Inches (mm)	(KPI) King Pin Intersection Inches (mm)	Wheel-End Series	Axle Model
18,000 (8172)	3.50 (88.9)	68.5 (1739.9)	A	FL-941
18,000 (8172)	3.74 (95.0)	71 (1803.4)	A	MFS-18-133A-N
18,000 (8172)	5.00 (127.0)	68.83 (1748.3)	A	FL-943
20,000 (9080)	3.50 (88.9)	68.5 (1739.9)	A	FL-941
20,000 (9080)	5.00 (127.0)	68.83 (1748.3)	A	FL-943
20,000 (9080)	3.74 (95.0)	71 (1803.4)	A	MFS-20-133A-N

Wheel-End Series		
	Hub	Knuckle
A	Conventional	Standard
B	Conventional	Integral Tie Rod
C	Conventional	Integral Tie Rod and Torque Plate
D	Unitized	Integral Tie Rod and Spider

Refer to page 20 for footnotes.

# Front Drive Steer Axles

**MERITOR®**

Rating Pounds (kg)	Axle Model	Standard Ratios	Ring Gear Size Inches (mm)	Bowl Offset Inches (mm) ⑧	Maximum Turn Angle	Joint Type	(KPI) King Pin Intersection Distance Inches (mm)	Options	Wheel End Series
10,000 (4540)	MX-10-120	3.31, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.88, 5.13, 5.29, 5.57, 5.86, 6.14, 6.83, 7.17	13.25 (336.6)	10.0 (254) passenger side standard 10.75 (273) passenger side wide track	42°	Double Cardan	69.0 (1752) standard 70.5 (1790) wide track	CTI, limited slip diff	U
12,000 (5448)	MX-12-120								
14,000 (6350)	MX-14-120								
16,000 (7258)	MX-16-120								
17,000 (7945)	MX-17-140	2.79, 2.93, 3.07, 3.21, 3.42, 3.58, 3.73, 3.90, 4.11, 4.33, 4.56, 4.63, 4.88, 5.13, 5.29, 5.57, 5.86, 6.14, 6.43, 6.83, 7.17	15.31 (388.9)	0	35°	Single Cardan	66.5 (1689) standard 68.5 (1740) wide track	CTI, limited slip diff, diff lock	
19,000 (8626)	MX-19-140								
21,000 (9534)	MX-21-140								
	MX-21-160	3.07, 3.21, 3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.38, 5.63, 5.86, 6.14, 6.43, 6.83, 7.17	18.00 (457.2)	0	35°	66.5 (1689) standard 68.5 (1740) wide track	CTI, diff lock		
23,000 (10 442)	MX-23-160							4.10, 4.56, 4.89, 5.13, 5.29, 5.38, 5.63, 6.14, 6.83, 7.17	

Refer to page 20 for footnotes.

**Hypoid Single-Reduction**

Rating Pounds (kg)	Axle Model	GCW Highway Pounds (kg)		Standard Ratios (High/Low Range)	Ring Gear Size (Pitch Diameter) Inches (mm)	Axle Shaft Spline Size Inches (mm)	Body Diameter Inches (mm)	Housing Box Size Inches (mm)	Wall Thickness at Spring Seat Inches (mm)	Wheel End Series
		Turnpike	Paved							
10,000 (4540)	<b>MS-10-113</b>	26,000 (11 804)		3.07, 3.15, 3.31, 3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.78, 5.13, 5.38, 5.86, 6.14	11.50 (292)	1.54 (39.1) 37 Teeth	1.516 (38.5)	4.49 x 3.42 (114 x 87)	0.37 (9.5)	C
11,000 (4994)	<b>MS-11-113</b>									
12,000 (5448)	<b>MS-12-113</b>									
13,000 (5902)	<b>RS-13-120</b>	40,000 (18 160)		3.31, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.88, 5.13, 5.29, 5.57, 5.86, 6.14, 6.83, 7.17	13.25 (336.6)	1.75 (44.5) 34 Teeth	1.62 (41.1)	4.25 x 3.81 (108 x 97)	0.43 (11.0)	F
15,000 (6810)	<b>RS-15-120</b>									
17,500 (7945)	<b>RS-17-144</b>	50,000 (22 700)		2.64, 2.79, 2.93, 3.07, 3.21, 3.42, 3.58, 3.73, 3.90, 4.11, 4.33, 4.63, 4.88, 5.13, 5.29, 5.57, 5.86, 6.14, 6.43, 6.83, 7.17	15.31 (388.9)	2.10 (53.3) 41 Teeth	1.88 (47.8)	5.25x 4.62 (134 x 117)	0.37 (9.5) 0.56 (14.3) Wide Track	R
	<b>RS-17-144A</b>									
	<b>RS-17-145</b> ⑦									
	<b>RS-17-145A</b>									
19,000 (8626)	<b>RS-19-144</b>	60,000 (27 240)		2.64, 2.79, 3.08, 3.36, 3.55, 3.70, 3.90, 4.11	15.31 (388.9)	2.10 (53.3) 41 Teeth	1.88 (47.8)	5.25x 4.62 (134 x 117)	0.37 (9.5) 0.56 (14.3) Wide Track	R
	<b>RS-19-144A</b>									
	<b>RS-19-145</b> ⑦									
	<b>RS-19-145A</b> ⑦									
21,000 (9534)	<b>MS-21-144MA-N</b>	127,000 (57 658) 100,000 (45 400)		2.64, 2.79, 2.93, 3.07, 3.21, 3.42, 3.58, 3.73, 3.90, 4.11, 4.33, 4.63, 4.88, 5.13, 5.29, 5.57, 5.86, 6.14, 6.43, 6.83, 7.17	18.00 (457.2)	2.10 (53.3) 41 Teeth	1.88 (47.8) 2.00 (50.8) ③	5.25x 4.62 (134 x 117)	0.43 (11.0) 0.56 (14.3) Wide Track	R
	<b>RS-21-145</b> ⑤⑦									
	<b>RS-21-145A</b> ⑤⑦									
	<b>RS-21-160</b> ⑤⑦	127,000 (57 658) 100,000 (45 400)	3.07, 3.21, 3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.38, 5.63, 6.14, 6.43, 6.83, 7.17	18.00 (457.2)	2.35 (59.7) 46 Teeth	2.25 (57.2)	0.63 (16.0) Wide Track			
	<b>RS-21-160A</b> ⑤⑦									

Refer to page 20 for footnotes.

# Single Rear Axles

**MERITOR®**

## Hypoid Single-Reduction

Rating Pounds (kg)	Axle Model	GCW Highway Pounds (kg)		Standard Ratios (High/Low Range)	Ring Gear Size (Pitch Diameter) Inches (mm)	Axle Shaft Spline Size Inches (mm)	Body Diameter Inches (mm)	Housing Box Size Inches (mm)	Wall Thickness at Spring Seat Inches (mm)	Wheel End Series
		Turnpike	Paved							
23,000 (10 442)	RS-23-160 ⑤⑦	127,000 (57 658)	100,000 (45 400)	2.80, 2.93, 3.07, 3.21, 3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.38, 5.63, 6.14, 6.43, 6.83, 7.17	18.00 (457.2)	2.35 (59.7) 46 Teeth	2.25 (57.2)	5.25 x 4.62 (134 x 117)	0.43 (11.0) 0.63 (16.0) Wide Track	R
	RH-23-160			3.07, 3.21, 3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.38, 5.63, 6.14, 6.43, 6.83, 7.17					0.43 (11.0) 0.63 (16.0) Wide Track	
	RS-23-160A (Aluminum Carrier) ⑤			3.07, 3.21, 3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.38, 5.63, 6.14, 6.43, 6.83, 7.17					0.43 (11.0) 0.63 (16.0) Wide Track	
	RH-23-161			3.07, 3.21, 3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.38, 5.63, 6.14, 6.43, 6.83, 7.17					0.43 (11.0) 0.63 (16.0) Wide Track	
	RS-23-161 ⑤⑦			2.80, 2.93, 3.07, 3.21, 3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.38, 5.63, 6.14, 6.43, 6.83, 7.17					0.50 (12.7)	
	RS-23-161A (Aluminum Carrier) ⑤			3.07, 3.21, 3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.38, 5.63, 6.14, 6.43, 6.83, 7.17					0.50 (12.7)	
	RS-23-186 ⑤⑦	140,000 (63 560)	125,000 (56 750)	2.93, 3.07, 3.21, 3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.13, 5.38, 5.63, 5.86, 6.14, 6.83, 7.17	19.62 (498.3)					

Refer to page 20 for footnotes.

**Hypoid Single-Reduction**

Rating Pounds (kg)	Axle Model	GCW Highway Pounds (kg)		Standard Ratios (High/Low Range)	Ring Gear Size (Pitch Diameter) Inches (mm)	Axle Shaft Spline Size Inches (mm)	Body Diameter Inches (mm)	Housing Box Size Inches (mm)	Wall Thickness at Spring Seat Inches (mm)	Wheel End Series
		Turnpike	Paved							
25,000 (11 350)	RS-25-160 ⑤⑦	127,000 (57 658)	100,000 (45 400)	2.80, 2.93, 3.07, 3.21, 3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.38, 5.63, 6.14, 6.43, 6.83, 7.17	18.00 (457.2)			5.25 x 4.62 (134 x 117)	0.63 (16.0)	R
	RS-25-160A (Aluminum Carrier) ⑤			3.07, 3.21, 3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.38, 5.63, 6.14, 6.43, 6.83, 7.17						
26,000 (11 804)	RH-26-185	140,000 (63 560)	120,000 (54 480)	3.73, 4.10, 4.30, 4.56, 4.89, 5.38, 6.14, 6.83, 7.17	19.62 (498.3)	2.35 (59.7) 46 Teeth	2.25 (57.2)	5.50 x 5.50 (140 x 140)	0.56 (14.3)	U
	RS-26-185 ⑤⑦			2.93, 3.07, 3.21, 3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.13, 5.38, 5.63, 5.86, 6.14, 6.83, 7.17						
30,000 (13 620)	RH-30-185			3.73, 4.10, 4.30, 4.56, 4.89, 5.38, 6.14, 6.83, 7.17					0.56 (14.3) 0.63 (16.0) Wide Track	U
	RS-30-185 ⑦			2.93, 3.07, 3.21, 3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.13, 5.38, 5.63, 5.86, 6.14, 6.83, 7.17						

Refer to page 20 for footnotes.

# Single Rear Axles

**MERITOR®**

## Hypoid Planetary Two-Speed

Rating Pounds (kg)	Axle Model	GCW Highway Pounds (kg)		Standard Ratios (High/Low Range)	Ring Gear Size (Pitch Diameter) Inches (mm)	Axle Shaft Spline Size Inches (mm)	Body Diameter Inches (mm)	Housing Box Size Inches (mm)	Wall Thickness at Spring Seat Inches (mm)	Wheel-End Series
		Turnpike	Paved							
21,000 (9534)	RS-21-230 ⑤	60,000 (27 240)		4.56/6.36, 4.88/6.80, 5.38/7.50, 5.86/8.17, 7.17/10.0	16.00 (406.4)	2.00 (50.8) 39 Teeth	1.88 (47.8)	5.25 x 4.62 (134 x 117)	0.43 (11.0)	R
23,000 (10 442)	RS-23-240 ⑤	70,000 (31 780)		4.10/5.59, 4.30/5.86, 4.56/6.21, 4.88/6.65, 5.57/7.60, 6.14/8.38, 7.17/9.77	17.00 (431.8)	2.10 (53.3) 41 Teeth	2.00 (50.8)		0.50 (12.7)	

## Helical-Hypoid Double-Reduction

Rating Pounds (kg)	Axle Model	GCW Highway Pounds (kg)		Standard Ratios (High/Low Range)	Ring Gear Size (Pitch Diameter) Inches (mm)	Axle Shaft Spline Size Inches (mm)	Body Diameter Inches (mm)	Housing Box Size Inches (mm)	Wall Thickness at Spring Seat Inches (mm)	Wheel-End Series
		Turnpike	Paved							
23,000 (10 442)	RS-23-380 ⑤	145,000 (65 830)	125,000 (56 750)	5.52, 6.07, 6.37, 6.75, 7.24, 7.83, 9.14, 10.12, 10.62	19.62 (498.3)	2.35 (59.7) 46 Teeth	2.25 (57.2)	5.25 x 4.62 (134 x 117)	0.50 (12.7)	R
26,000 (11 804)	RS-26-380 ⑤							5.50 x 5.50 (140 x 140)	0.56 (14.3)	
30,000 (13 620)	RS-30-380							0.56 (14.3) 0.63 (16.0) Wide Track	U	
38,000 (17 252)	RS-38-380 ⑨							6.50 x 5.50 (165 x 140)	0.66 (17) Cast Housing	W

Refer to page 20 for footnotes.

**Hypoid Single-Reduction**

Rating Pounds (kg)	Axle Model	GCW Highway Pounds (kg)		Standard Ratios (High/Low Range)	Ring Gear Size (Pitch Diameter) Inches (mm)	Axle Shaft Spline Size Inches (mm)	Body Diameter Inches (mm)	Housing Box Size Inches (mm)	Wall Thickness at Spring Seat Inches (mm)	Wheel-End Series
		Turnpike	Paved							
34,000 (15 436)	RT-34-144	80,000 (36 320)	80,000 (36 320)	2.64, 2.79, 2.93, 3.07, 3.21, 3.42, 3.58, 3.73, 3.90, 4.11, 4.33, 4.63, Optional ratios available					0.37 (9.5) 0.56 (14.3) Wide Track	
	RT-34-144P			2.79, 2.93, 3.07, 3.21, 3.42, 3.58, 3.73, 3.90, 4.11, 4.33, 4.63, Optional ratios available						
	RT-34-144A (Aluminum Carriers)			2.64, 2.79, 2.93, 3.07, 3.21, 3.42, 3.58, 3.73, 3.90, 4.11, 4.33, 4.63, Optional ratios available						
40,000 (18 160)	RT-40-145 ⑤	145,000 (65 830)	125,000 (56 750)	2.64, 2.79, 2.93, 3.07, 3.21, 3.42, 3.58, 3.73, 3.90, 4.11, 4.33, 4.63, 4.88, 5.29, 5.86, 6.14, 6.43, 6.83, 7.17	15.31 (388.9)	2.10 (53.3) 41 Teeth	1.88 (47.8) 2.00 (50.8) ③	5.25 x 4.62 (134 x 117)	0.37 (9.5), 0.43 (11.0) Required for Some Air Suspension, 0.56 (14.3) Wide Track	R
	RT-40-145P ⑤			2.64, 2.79, 2.93, 3.07, 3.21, 3.42, 3.58, 3.73, 3.90, 4.11, 4.33, 4.63, 4.88, 5.29, 5.86, 6.14, 6.43, 6.83, 7.17						
	RT-40-145A (Aluminum Carriers) ⑤			2.64, 2.79, 2.93, 3.07, 3.21, 3.42, 3.58, 3.73, 3.90, 4.11, 4.33, 4.63, 4.88, 5.29, 5.86, 6.14, 6.43, 6.83, 7.17						
	MT-40-143MA-N*			2.64, 3.36, 3.55, 3.70			1.88 (47.8)		0.37 (9.5)	
	MT-40-144MA-N								0.43 (11)	
	RT-40-160 ⑤	185,000 (83 990)	160,000 (72 640)	3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.38, 5.63, 6.14, 6.43, 6.83, 7.17	18.00 (457.2)	2.35 (59.7) 46 Teeth	2.25 (57.2)		0.43 (11.0) 0.63 (16.0) Wide Track Only Available as RT-46-164 Series	
	RT-40-160A (Aluminum Rear Carrier) ⑤			3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.38, 5.63, 6.14, 6.43, 6.83, 7.17						

Refer to page 20 for footnotes.

\* Axle model designations will vary according to options (unitized wheel-ends UWE-90) and variations specified on this tandem. Contact ArvinMeritor axle application engineering for details.

## Hypoid Single-Reduction

Rating Pounds (kg)	Axle Model	GCW Highway Pounds (kg)		Standard Ratios (High/Low Range)	Ring Gear Size (Pitch Diameter) Inches (mm)	Axle Shaft Spline Size Inches (mm)	Body Diameter Inches (mm)	Housing Box Size Inches (mm)	Wall Thickness at Spring Seat Inches (mm)	Wheel-End Series
		Turnpike	Paved							
40,000 (18 160)	<b>RT-40-160P</b> ⑤	185,000 (83 990)	160,000 (72 640)	3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.38, 5.63, 6.14, 6.43, 6.83, 7.17	18.00 (457.2)	2.35 (59.7) 46 Teeth	2.25 (57.2)	5.25 x 4.62 (134 x 117)	0.43 (11.0) 0.63 (16.0) Wide Track Only Available as RT-46-164 Series	R
44,000 (19 976)	<b>RT-44-145</b> ⑤ <b>RT-44-145P</b> ⑤	Not Rated	68,000 (30 872) GVWR Only	3.42, 3.58, 3.73, 3.90, 4.11, 4.33, 4.63, 4.88, 5.29, 5.86	15.31 (388.9)	2.10 (53.3) 41 Teeth	2.00 (50.8)		0.50 (12.7) 0.56 (14.3) Wide Track	
46,000 (20 884)	<b>RT-46-160P</b> ⑤	185,000 (83 990)	160,000 (72 640)	3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.38, 5.63, 6.14, 6.43, 6.83, 7.17	18.00 (457.2)	2.35 (59.7) 46 Teeth	2.25 (57.2)	5.25 x 4.62 (134 x 117)	0.50 (12.7) 0.63 (16.0) Wide Track Only Available as RT-46-164 Series	R
	<b>RT-46-160A</b> (Aluminum Rear Carrier) ⑤			3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.38, 5.63, 6.14, 6.43, 6.83, 7.17					0.63 (16.0)	
	<b>RT-46-164EH</b> <b>RT-46-16HEH</b> ⑤			3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.38, 5.63, 6.14, 6.43, 6.83, 7.17						
	<b>RT-46-164P</b> <b>RT-46-16HP</b> ⑤			3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.38, 5.63, 6.14, 6.43, 6.83, 7.17						
50,000 (22 700)	<b>RT-50-160</b> ⑤ <b>RT-50-160P</b> ⑤	245,000 (111 230)	215,000 (97 610)	3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.38, 5.63, 6.14, 6.43, 6.83, 7.17	19.62 (498.3)			5.50 x 5.50 (140 x 140)	0.56 (14.3)	U
	<b>RT-52-185</b> ⑤			3.73, 4.10, 4.30, 4.56, 4.89, 5.38, 6.14, 6.83, 7.17					0.56 (14.3) 0.63 (16.0) Wide Track	
58,000 (26 332)	<b>RT-58-185</b> ⑥									

Refer to page 20 for footnotes.



**Helical-Hypoid Double-Reduction**

Rating Pounds (kg)	Axle Model	GCW Highway Pounds (kg)		Standard Ratios (High/Low Range)	Ring Gear Size (Pitch Diameter) Inches (mm)	Axle Shaft Spline Size Inches (mm)	Body Diameter Inches (mm)	Housing Box Size Inches (mm)	Wall Thickness at Spring Seat Inches (mm)	Wheel-End Series
		Turnpike	Paved							
52,000 (23 608)	<b>RT-52-380</b> ⑤	255,000 (115 770)	225,000 (102 150)	5.52, 6.07, 6.37, 6.75, 7.24, 7.83, 9.14, 10.12, 10.62	19.62 (498.3)	2.35 (59.7) 46 Teeth	2.25 (57.2)	5.50 x 5.50 (140 x 140)	0.56 (14.3)	R
58,000 (26 332)	<b>RT-58-380</b> ⑥								0.56 (14.3) 0.63 (16.0) Wide Track	U
70,000 (31 780)	<b>RT-70-380</b> ⑤					2.55 (64.8) 50 Teeth	2.38 (60.5)	6.50 x 5.50 (165 x 140)	0.66 (17.0) Cast Housing	W

Refer to page 20 for footnotes.

## Hypoid Single-Reduction

Rating Pounds (kg)	Axle Model	GCW Highway Pounds (kg)	Standard Ratios (High/Low Range)	Ring Gear Size (Pitch Diameter) Inches (mm)	Axle Shaft Spline Size Inches (mm)	Body Diameter Inches (mm)	Housing Box Size Inches (mm)	Wall Thickness at Spring Seat Inches (mm)	Wheel-End Series
69,000 (31 326)	<b>RZ-166</b> ⑤	Consult ArvinMeritor Axle Representative	3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.38, 5.63, 6.14, 6.43, 6.83, 7.17	Axle 1: 18.0 (457.2) Axle 2: 18.0 (457.2) Axle 3: 18.0 (457.2)			Axle 1, 2 and 3: 5.25 x 4.62 (134 x 117)	Axle 1, 2 and 3: 0.62 (16.0)	R
73,000 (33 142)	<b>RZ-186</b> ⑤		3.73, 4.10, 4.30, 4.56, 4.89, 5.38, 6.14, 6.83, 7.17	Axle 1: 19.6 (498.3) Axle 2: 18.0 (457.2) Axle 3: 18.0 (457.2)			Axle 1: 5.50 x 5.50 (140 x 140) Axle 2 and 3: 5.25 x 4.62 (134 x 117)	Axle 1: 0.56 (14.3) Axle 2 and 3: 0.62 (16.0)	
77,000 (34 958)	<b>RZ-188</b> ⑤		Axle 1: 19.6 (498.3) Axle 2: 19.6 (498.3) Axle 3: 19.6 (498.3)			Axle 1, 2 and 3: 5.50 x 5.50 (140 x 140)	Axle 1, 2 and 3: 0.56 (14.3)		

Refer to page 20 for footnotes.

**Single-Speed**

Transfer Case Model		T-2119 3-Shaft	T-2111 3-Shaft
Description			
Oil Capacity Vertical Position Pints (liters) ④		7.00 (3.31) Standard	3.0 (1.42)
Typical Weight Pounds (kg) ②		620 (281.5) Basic Unit	305 (138.5) Basic Unit
Vertical Output Drop Inches (mm)		17.25 (438.15)	16.125 (409.6)
Lateral Output Offset Inches (mm)		1.31 (33.27)	0 (0.0)
Maximum Torque Rating by Ratio ⊖	Ratio(s) Optional	1.00:1 1.21:1 Optional 0.83:1 Optional	1.00:1
	lb-ft (N·m)	20,300 (27 116) 16,500 (22 411) 20,000 (27 116)	11,000 (14 914) Standard Configuration 15,600 (21 150) Thru-Shaft Version
Continuous Speed		2600 rpm	2450 rpm
Maximum Speed Rating		3200 rpm	2900 rpm
Park Brake		Not Available	Optional
Oil Pump		Standard	Optional
Airshift Front Declutch		Optional	
Front Declutch Indicator Switch(es)		One or Two Optional	
PTO			Optional
Integral Mounting Bosses		Standard	
Integral Lifting Loops		No	Standard
Applicable Maintenance Manual		Maintenance Manual MM-0112S	Maintenance Manual 3B

Refer to page 20 for footnotes.

## Two-Speed

Transfer Case Model	MTC-4210 4-Shaft	MTC-4213 4-Shaft
Description		
Oil Capacity Vertical Position Pints (liters) ④	9 (4.3)	
Typical Weight Pounds (kg) ②	620 (281.5) Basic Unit	625 (284) Basic Unit
Output Location	Front/Rear	
Input to Output Drop Inches (mm)	9.0 (228.6)	
Maximum Torque Rating by Ratio Ratio / lb-ft (N·m) ①	1.00:1 / 9,750 (13 260) 2.05:1 / 5,000 (6800)	1.00:1 / 13,000 (17 680) 2.05:1 / 6500 (8840)
Maximum Speed Rating	3515 rpm With Cooler 2850 rpm Less Cooler	
PTO	Optional	Not Available
Park Brake	Not Available	
Oil Pump	Standard / Provision for Oil Cooler Connection Option	
Speedo Gears	Optional	
Front Declutch	Standard	
Proportional Differential	Not Available	
Integral Mounting Bosses	Standard	
Airshift High/Low	Standard	
Airshift Front Declutch	Standard	
Synchronized Shift	Not Available	
Applicable Maintenance Manual	Maintenance Manual MM-0146	

Refer to page 20 for footnotes.

**Two-Speed**

Transfer Case Model Description	TG-2213RD 2-Shaft Rear Engine
Oil Capacity Vertical Position Pints (liters) ④	6.0 (2.8)
Typical Weight Pounds (kg) ②	465 (211)
Output Location	Front/Rear
Input to Output Drop Inches (mm)	9.148 (232.4)
Maximum Torque Rating by Ratio Ratio / lb-ft (N-m) ①	1.00:1 / 13,000 (17 680) 2.28:1 / 10,500 (14 280) 2.47:1 / 10,500 (14 280)
PTO	Not Available
Park Brake	Not Available
Oil Pump	Standard
Speedo Gears	Not Available
Front Declutch	Optional
Proportional Differential	Not Available
Integral Mounting Bosses	Standard
Airshift High/Low	Standard
Airshift Front Declutch	Standard
Synchronized Shift	Not Available
Applicable Maintenance Manual	Maintenance Manual 3G

Refer to page 20 for footnotes.

- ① Transfer case input torque ratings stated are for guide selection only. Application approval is required to conform the torque rating.
- ② Typical transfer case weights are indicated for basic configurations with common flanges and yokes (less lubricant).
- ③ 2.00" diameter shafts in axles with driver controlled main differential lock, NoSPIN® differential or wide track.
- ④ Transfer case oil capacities indicated are for basic units. Additional oil recommendations are available dependent upon features and configurations required. Please contact your ArvinMeritor representative for specific lubrication recommendations.
- ⑤ Central tire inflation (CTI) system compatible.
- ⑥ Meritor central tire inflation (CTI) available. Axle derated to 52,000 pounds (23 608 kg) GAWR.
- ⑦ Available with optional TELMA retarder mounted to the axle for certain approved applications. Refer to ArvinMeritor product profile, TP-9482. To obtain this publication, call ArvinMeritor's Customer Service Center at 800-535-5560.
- ⑧ The medium-duty MX Series axle housings are standard. Contact ArvinMeritor Engineering to discuss optional bowl offsets and spring mounting options.
- ⑨ 2.35" (59.7 mm), 46 teeth axle shaft spline size and 2.25" (57.2 mm) body diameter for high entry axles.

**ArvinMeritor™**

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