









Highway Series™ Ratings

Model	Serial Number	Ratio	Park Pawl			Max Input Torque Max Input w/SEM Torque Torque² Limiting².3		Max GVW	Max GCW	
_		_		hp (kW)	lb-ft (N•m)	lb-ft (N•m)	lb-ft (N•m)	lbs (kg)	lbs (kg)	
1000 HS ¹	631	Close Ratio	Yes	340 (254)	575 (780)	660 (895)	950 (1288)	19,500 (8845)	26,000 (11,800)	
1350 HS ¹	631	Close Ratio	Yes	340 (254)	575 (780)	660 (895)	950 (1288)	19,500 (8845)	30,000 (13,600)	
2100 HS1	631	Close Ratio	No	340 (254)	575 (780)	660 (895)	950 (1288)	26,000 (11,800)	26,000 (11,800)	
2200 HS ¹	631	Close Ratio	Yes	340 (254)	575 (780)	660 (895)	950 (1288)	26,000 (11,800)	26,000 (11,800)	
2300 HS ⁶	631	Close Ratio	No	365 ⁵ (272) ⁵	N/A	510 ⁵ (691) ⁵	950 ⁵ (1288) ⁵	33,000 (15,000)	33,000 (15,000)	
2350 HS ¹	631	Close Ratio	Yes	340 (254)	575 (780)	660 (895)	950 (1288)	30,000 (13,600)	30,000 (13,600)	
2500 HS1	631	Wide Ratio	No	340 (254)	575 (780)	660 (895)	950 (1288)	33,000 (15,000)	33,000 (15,000)	
2550 HS ¹	631	Wide Ratio	Yes	340 (254)	575 (780)	660 (895)	950 (1288)	30,000 (13,600)	30,000 (13,600)	
3000 HS	651	Close Ratio	N/A	370 (276)	1100 (1491)	1250 ⁷ (1695) ⁷	1600 (2169)	80,000 (36,288)	80,000 (36,288)	
4000 HS	661	Close Ratio	N/A	580 (433)	1770 (2400)	1850 ⁸ (2508) ⁸	2600 (3525)	-	-	
4500 HS	661	Wide Ratio	N/A	580 (433)	1650 (2237)	1850 ⁸ (2508) ⁸	2600 (3525)	_	_	

¹ Gross ratings as defined by ISO 1585 or SAE J1995. 2 SEM = engine controls with Shift Energy Management. 3 Turbine torque limit based on iSCAAN standard deductions. 4 SEM and torque limiting are required to obtain this rating. 5 Only available with gasoline powered engine applications. 6 Requires Allison Transmission engine-transmission combination approval. Only available in gears three through six. 7 Check with your OEM to ensure offerings. 8 Available in gears three through six.

Rugged Duty Series™Ratings

Model	Vocation	Ratio	Park Pawl	Max Input Power ²	Max Input Torque²	Max Input Torque w/SEM Torque	Max Turbine Torque⁴	Max GVW	Max GCW
_		_	_	hp (kW)	lb-ft (N•m)	Limiting ^{2,3}	lb-ft (N•m)	lbs (kg)	lbs (kg)
1000 RDS ¹	On-/Off-Highway	Close Ratio	Yes	340 ^{5,8} (254) ^{5,8}	575 (780)	660 ^{5,8} (895) ^{5,8}	950 ⁵ (1288) ⁵	19,500 (8845)	26,000 (11,800)
1350 RDS ¹	On-/Off-Highway	Close Ratio	Yes	340 ^{5,8} (254) ^{5,8}	575 (780)	660 ^{5,8} (895) ^{5,8}	950 ⁵ (1288) ⁵	19,500 (8845)	30,000 (13,600)
2100 RDS ¹	On-/Off-Highway	Close Ratio	No	340 ^{5,8} (254) ^{5,8}	575 (780)	660 ^{5,8} (895) ^{5,8}	950 ⁵ (1288) ⁵	26,000 (11,800)	26,000 (11,800)
2200 RDS ¹	On-/Off-Highway	Close Ratio	Yes	340 ^{5,8} (254) ^{5,8}	575 (780)	660 ^{5,8} (895) ^{5,8}	950 ⁵ (1288) ⁵	26,000 (11,800)	26,000 (11,800)
2300 RDS ⁶	On-/Off-Highway	Close Ratio	No	3655 (272)5	N/A	510 ⁵ (691) ⁵	950 ⁵ (1288) ⁵	33,000 (15,000)	33,000 (15,000)
2350 RDS ^{1,8}	On-/Off-Highway	Close Ratio	Yes	340 ⁵ (254) ⁵	575 (780)	660 ⁵ (895) ⁵	950 ⁵ (1288) ⁵	30,000 (13,600)	30,000 (13,600)
2500 RDS ^{1,8}	On-/Off-Highway	Close Ratio	Yes	340 ⁵ (254) ⁵	575 (780)	660 ⁵ (895) ⁵	950 ⁵ (1288) ⁵	30,000 (13,600)	30,000 (13,600)
2550 RDS ^{1,8}	On-/Off-Highway	Wide Ratio	Yes	3405 (254)5	575 (780)	660 ⁵ (895) ⁵	950 ⁵ (1288) ⁵	30,000 (13,600)	30,000 (13,600)
3000 RDS	On-/Off-Highway	Close Ratio	N/A	370 (276)	1100 (1491)	1250 ^{7,8} (1695) ^{7,8}	1600 (2169)	80,000 (36,288)	80,000 (36,288)
3500 RDS	On-/Off-Highway	Wide Ratio	N/A	330 (246)	860 (1166)	10509 (1424)9	1450 ⁵ (1966) ⁵	80,000 (36,288)	80,000 (36,288)
4000 RDS	On-/Off-Highway	Close Ratio	N/A	58012 (433)12	1770 (2400)	185011 (2508)11	2600 (3525)		
4500 RDS	On-/Off-Highway	Wide Ratio	N/A	58012 (433)12	1650 (2237)	185011 (2508)11	2450 (3322)	_	
4700 RDS	On-/Off-Highway	Widest Ratio	N/A	58012 (433)12	1770 (2400)	1850 ¹⁰ (2508) ¹⁰	2600 (3525)		

¹ Available with xFE. 2 Gross ratings as defined by ISO 1585 or SAE J1995. 3 SEM = engine controls with Shift Energy Management. 4 Turbine torque limit based on iSCAAN standard deductions. 5 SEM and torque limiting are required to obtain this rating. 6 Only available in limited spark-ignited engine applications with full load governed speeds greater than 3800 rpm. 7 SEQ SEM SECTION SECTI

Highway Series[™] Physical Description

Base Model	Base Model Vocation		Length ¹	Depth² w/Deep Oil Pan/Sump	Depth² w/Shallow Oil Pan/Sump	Dry Weight	
			in (mm)	in (mm)	in (mm)	lbs (kg)	
1000/2000 ³							
SAE No. 3 mg	ounting	HS	28.02 (711.7)	11.22 (285.1)	10.71 (272.0)	323 (146.5)	
SAE No. 2 mg	ounting	HS	28.40 (721.2)	11.22 (285.1)	10.71 (272.0)	323 (146.5)	
3000							
Basic	model	HS	28.3 (718.7)	12.90 (327.7)	_	535 (243)	
With retard	der only	HS	28.29 (718.5)	12.90 (327.7)	_	615 (279)	
4000/4500							
Basic	model	HS	30.54 (775.7)	14.75 (374.7)	-	831 (377)	
With retard	der only	HS	30.54 (775.7)	14.75 (374.7)	_	906 (411)	

¹ Length measured from flywheel housing to end of output shaft. 2 Depth measured below transmission centerline. 3 2000 SP - only 2000 model available with shallow oil pan.

Rugged Duty Series[™] Physical Description

Base Model	Vocation Length ¹		Depth² w/Deep Oil Pan/Sump	Depth² w/Shallow Oil Pan/Sump	Dry Weight	
		in (mm)	in (mm)	in (mm)	lbs (kg)	
1000/2000 ³						
SAE No. 3 mounting	RDS	28.01 (711.4)	11.22 (285.1)	10.71 (272.0)	323 (146.5)	
SAE No. 2 mounting	RDS	28.39 (721.1)	11.22 (285.1)	10.71 (272.0)	323 (146.5)	
3000						
Basic model	RDS ⁴	28.30 (718.7)	12.90 (327.7)	11.14 (283.0)	535 (243)	
With PTO only	RDS ⁴	32.50 (825.4)	12.90 (327.7)	11.14 (283.0)	575 (261)	
With retarder only	RDS ⁴	28.29 (718.5)	12.90 (327.7)	11.14 (283.0)	615 (279)	
With PTO + retarder	RDS ⁴	32.49 (825.4)	12.90 (327.7)	11.14 (283.0)	655 (298)	
3700						
Basic model	SP	51.58 (1310.3)	21.90 (555.0)	_	1170 (530)	
4000/44306/4500						
Basic model	RDS⁵	30.54 (775.8)	14.75 (374.7)	13.29 (337.6)	831 (377)	
With PTO only	RDS⁵	33.41 (848.8)	14.75 (374.7)	13.29 (337.6)	893 (405)	
With retarder only	RDS⁵	30.54 (775.8)	14.75 (374.7)	13.29 (337.6)	906 (411)	
With PTO + retarder	RDS⁵	33.41 (848.8)	14.75 (374.7)	13.29 (337.6)	968 (439)	
4700/4800						
Basic model	RDS	40.61 (1031.5)	14.89 (378.2)		1087 (493)	
With PTO only	RDS	43.49 (1104.5)	14.89 (378.2)	_	1149 (521)	
With retarder only	RDS	40.61 (1031.5)	14.89 (378.2)		1162 (527)	
With PTO + retarder	RDS	43.49 (1104.5)	14.89 (378.2)		1224 (555)	

¹ Length measured from flywheel housing to end of output shaft. 2 Depth measured below transmission centerline. 3 2000 SP – only 2000 model available with shallow oil pan. 4 3000 HS, RDS, PTS – Available with deep oil pan only. 5 4000 HS, RDS, SP – Available with deep oil pan only. 6 4430 is an SP model only – available only with deep oil pan.

Features + Advantages

Shift Energy Management (SEM) with torque limiting

Ratings up to 340 hp/660 lb-ft on 1000, 1350, 2100, 2200, 2350, 2500 and 2550 HS.

Ratings up to 365 hp/510 lb-ft on 2300 HS.

Ratings up to 370 hp/1250 lb-ft on 3000 HS.

Ratings up to 580 hp/1850 lb-ft on 4000 and 4500 HS.

New innovative shift scheduling uses an algorithm to choose the most efficient shift point, based on specs, vehicle and environmental parameters.

Neutral at Stop

Automatically eliminates the transmission load on the engine when the vehicle is at a full stop to save fuel and reduce overall vehicle emissions.

Acceleration Rate Management

Mitigates aggressive driving by controlling engine torque based on the vehicle's grade and load.

At the push of a button, oil levels are displayed on shift selectors for easy identification. Standard on 3000, 4000 and 4500 HS.

Deep oil pan/sump standard

Optional shallow oil pan available on 1000 HS and 1350 HS.

Eliminates unnecessary oil and filter changes by monitoring various operating parameters to determine and alert when a specific maintenance function is required.

Gear Ratios Torque Converter Multiplication Not Included

Model	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Reverse	2nd Reverse
1000 ¹ /1350 ¹ /2100 ¹ 2200 ¹ /2300 ¹ /2350	3.10:1	1.81:1	1.41:1	1.00:1	0.71:1	0.61:12		-4.49:1	
2500 ¹ /2550 ¹	3.51:1	1.90:1	1.44:1	1.00:1	0.74:1	0.64:12	_	-5.09:1	
3000	3.49:1	1.86:1	1.41:1	1.00:1	0.75:1	0.65:1		-5.03:1	
4000	3.51:1	1.91:1	1.43:1	1.00:1	0.74:1	0.64:1	_	-4.80:1	
4500	4.70:1	2.21:1	1.53:1	1.00:1	0.76:1	0.67:1		-5.55:1	
4700	7.63:1 ²	3.51:1	1.91:1	1.43:1	1.00:1	0.74:1	0.64:1	-4.80:1	-17.12:1 ³

1 Available with xFE. 2 Check with you OEM to ensure offerings. 3 SEM/LRTP or LRTP only is required.

Notes



Our Promise

Provide the most reliable and valued propulsion solutions in the world to enable our customers to work more efficiently.

- Trusted by more than 300 OEMs worldwide
- A strong history of innovation with more than 1,000 patents
- Improved fuel economy with FuelSense® 2.0 with DynActive® Shifting technology
- Over seven million fully automatic transmissions delivered

A World of Support

From our headquarters in Indianapolis, Indiana, USA, to our plants in Hungary and India, to approximately 1,400 Allison Authorized Distributors and Dealers around the globe, you are never far from the products, training, service and support you demand.

Our support starts from the moment an Allison transmission is specified. We work with you to ensure that the model and ratings fit your engine to create a tailored package of powerful performance and reliable efficiency. When you need parts or service, you can count on global access to factory-trained specialists and Allison Genuine PartsTM.

One Allison Way Indianapolis, Indiana USA 46222-3271

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