




Off Road Series™



Reliability is Everything



Faster Acceleration =
Higher Average Speeds =
More Loads Per Day

When the Going Gets Tough, the Tough Choose Allison

When you need a transmission you can rely on for transporting coal, precious metals, aggregate and other applications around the world, choose the product that won't let you down—an Allison fully automatic. Allison transmissions are the most reliable and durable on the market, increasing uptime to give you more loads per day and peace of mind.

Power Meets Efficiency

Our 3000-9000 Series transmissions are engineered specifically for the severe duty-cycles trucks face in the mining environments you deal with every day. Rigid, wide-body and articulated dump trucks outfitted with Allison Automatics accelerate quickly and smoothly.

Allison's Continuous Power Technology™ provides more power to the wheels than other transmission technologies. Your trucks will accelerate faster and run at higher average speeds, allowing them to make more runs per day. Allison Automatics are also designed to carry more tonnage per gallon or liter of fuel, which, combined with our higher average speeds, can greatly increase your operation's productivity.



Transport Heavy Loads

Continuous Power Technology™

Torque Multiplication/Startability

Optimal Maneuverability

Increased Uptime For Your Fleet

The gravel roads, loose soil, mud and steep grades found at mining operations put enormous strain on transmissions. These conditions make transmissions more susceptible to driver abuse. An Allison Automatic has no mechanical clutch, so downtime is rarely a concern. The only preventative maintenance consists of routine oil and filter changes, which can be monitored using prognostics.

7 Years Running
17 Hours a Day
43,000 Working Hours
0 Hours Downtime*



8610 ORS

Learn how Allison helped our customer, Voltas, achieve peak productivity at allisontransmission.com/voltas.

* Productivity numbers provided by Voltas





“Allison transmissions are highly regarded in the mining industry for their excellent performance, quality, reliability and increased uptime. Allison Off Road Series™ transmissions only require their first overhaul after 18,000 hours.”

- Zhao Xinchun, Manager of NHL Customer Service Center

Be More Productive with Better Fuel Economy

Allison transmissions automatically adjust shift points to improve fuel economy. When the truck bed is empty, the transmission shifts at lower engine speeds, which consumes less fuel. When carrying a full load, the transmission adjusts to shift at higher speeds to provide more power.

Our innovative transmissions also manage downshifting to provide the hydraulic retarder with the capacity to maintain downhill speed while reducing service brake usage. Additionally, Allison Automatics give drivers a choice of operating modes to best suit driving conditions.

The Torque Converter You Can Trust

Our torque converter smoothly multiplies peak engine torque, delivering more power to the wheels. By multiplying the engine power, drivers get increased performance, faster acceleration and greater operational flexibility.

Allison Transmission Off Road Series™

Ratings

Model	Ratio	Park Pawl	Gross Input Power	Gross Input Torque	Net Turbine Torque	Gross Input Power	Gross Input Torque	Net Turbine Torque	Max GVW	Max GCW
			With Torque Management			Without Torque Management				
			hp (kW)	lb-ft (N•m)	lb-ft (N•m)	hp (kW)	lb-ft (N•m)	lb-ft (N•m)	lbs (kg)	lbs (kg)
3000 ORS Articulated/ Rigid Rear Dump	Close	No				250 (186)	664 (900)	1575 (2135)	98,100 (44,500)	-
3200 ORS - Articulated/ Rigid Rear Dump	Close	No				300 (224)	811 (1100)	1575 (2135)	98,100 (44,500)	-
3500 ORS - Articulated/ Rigid Rear Dump	Wide	No				330 (246)	811 (1100)	1420 (1925)	98,100 (44,500)	-
4000 ORS - Articulated Dump	Close	No				480 (358)	1625 (2203)	2450 (3322)	151,017 (68,500)	-
4000 ORS - Rigid Rear Dump	Close	No				480 (358)	1550 (2102)	2450 (3322)	125,663 (57,000)	-
4200 ORS - Articulated Dump	Close	No				480 (358)	1700 (2305)	2450 (3322)	178,574 (81,000)	-
4430 ORS - Articulated/ Rigid Rear Dump	Wide	No				380 (283)	1235 (1675)	2450 (3322)	151,017 (68,500)	-
4500 ORS - Articulated Dump	Wide	No	480 (358)	1625 ¹ (2203) ¹	2450 (3322)	480 (358)	1550 (2102)	2450 (3322)	151,017 (68,500)	-
4500 ORS - Rigid Rear Dump	Wide	No				480 (358)	1550 (2102)	2450 (3322)	151,017 (68,500)	-
4600 ORS - Articulated/ Rigid Rear Dump	Wide	No	480 (358)	1700 ¹ (2305) ¹	2450 (3322)	480 (358)	1550 (2102)	2450 (3322)	178,574 (81,000)	-
4700 ORS - Articulated Dump	Deep	No				500 (373)	1700 (2305)	2450 (3322)	178,574 (81,000)	-
4700 ORS - Mining/ Off-Highway	Deep	No				580 (433)	1770 (2400)	2600 (3525)	138,000 (62,596)	-
4800 ORS - Articulated Dump/Rigid Rear Dump	Deep	No				605 (451)	1850 (2508)	2600 (3525)	211,644 (96,000)	-
4800 ORS - Mining/ Off-Highway	Deep	No	605 (451)	1850 ² (2508) ²	2600 (3525)				138,000 (62,596)	-
5620 ORS ³ - Hauling Applications	-	No				600 (447)	1875 (2542)	3475 (4711)	-	-
6620 ORS - Hauling Applications	-	No				760 (567)	2500 (3390)	3790 (5139)	-	-
6625 ORS - Hauling Applications	-	No				760 (567)	2500 (3390)	3790 (5139)	-	-
8610 ORS - Hauling Applications	-	No				1050 (783)	3600 (4881)	5650 (7660)	-	-
9610 ORS - Hauling Applications	-	No				1350 (1007)	4000 (5423)	6000 (8135)	-	-

1 - Available in gears three through six 2 - Available in gears four through seven 3 - Straight-Thru + Dropbox models

Gear Ratios Torque Converter Multiplication Not Included

Model	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Reverse	2nd Reverse
3000/3200	3.49:1	1.86:1	1.41:1	1.00:1	0.75:1	0.65:1	N/A	N/A	-5.03:1	N/A
3500	4.59:1	2.25:1	1.54:1	1.00:1	0.75:1	0.65:1	N/A	N/A	-5.00:1	N/A
4000/4200	3.51:1	1.91:1	1.43:1	1.00:1	0.74:1	0.64:1	N/A	N/A	-4.80:1	N/A
4430/4500/4600	4.70:1	2.21:1	1.53:1	1.00:1	0.76:1	0.67:1	N/A	N/A	-5.55:1	N/A
4700/4800	7.63:1 ¹	3.51:1	1.91:1	1.43:1	1.00:1	0.74:1	0.64:1	N/A	-4.80:1	-17.12:1 ²
5620/6620/6625	4.00:1	2.68:1	2.01:1	1.35:1	1.00:1	0.67:1	N/A	N/A	-5.15:1	-3.46:1
8610	4.24:1	2.32:1	1.69:1	1.31:1	1.00:1	0.73:1	N/A	N/A	-5.75:1	N/A
9610	4.24:1	3.05:1	2.32:1	1.67:1	1.00:1	0.72:1	N/A	N/A	-5.75:1	-4.13:1

1 - Manually selected first gear 2 - SEM/LRTP or LRTP only is required

Physical Description

Model	Length¹	Depth² w/ Deep Oil Pan/Sump	Depth² w/ Shallow Oil Pan/ Sump	Dry Weight
	in (mm)	in (mm)	in (mm)	lbs (kg)
3000³/3200/3500				
Basic Model	28.30 (718.7)	12.90 (327.7)	11.13 (282.6)	535 (243)
With PTO only	32.50 (825.4)	12.90 (327.7)	11.13 (282.6)	575 (261)
With retarder only	28.29 (718.5)	12.90 (327.7)	11.13 (282.6)	615 (279)
With PTO & retarder	32.49 (825.2)	12.90 (327.7)	11.13 (282.6)	655 (298)
4000⁴/4200/4430⁵/4500/4600				
Basic Model	30.54 (775.7)	14.75 (374.7)	13.29 (337.6)	831 (377)
With PTO only	33.41 (848.7)	14.75 (374.7)	13.29 (337.6)	893 (405)
With retarder only	30.54 (775.8)	14.75 (374.7)	13.29 (337.6)	906 (411)
With PTO & retarder	33.42 (848.8)	14.75 (374.7)	13.29 (337.6)	968 (439)
4700/4800				
Basic Model	40.61 (1031.5)	14.75 (374.7)	N/A	1087 (493)
With PTO only	43.49 (1104.5)	14.75 (374.7)	N/A	1149 (521)
With retarder only	40.61 (1031.5)	14.75 (374.7)	N/A	1162 (527)
With PTO & retarder	43.49 (1104.5)	14.75 (374.7)	N/A	1224 (555)

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

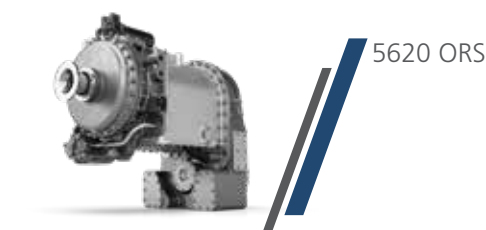
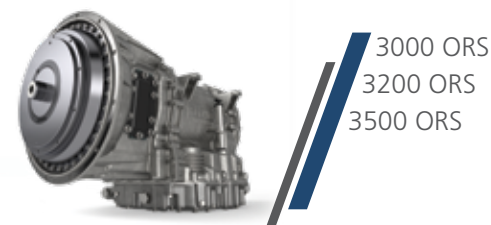
Model	Length w/o Retarder	Length w/ Retarder	Depth (Basic Model)	Depth w/ Direct Mount Filters	Dry Weight
	in (mm)	in (mm)	in (mm)	in (mm)	lbs (kg)
5620	43.1 (1095)	46.6 (1182)	31.0 (788)	35.6 (904)	2220 (998)
5620 w/ Dropbox	46.7 (1185)	50.1 (1273)	40.7 (1034)	45.3 (1150)	2750 (1247)
6620/6625	43.1 (1095)	46.6 (1182)	34.1 (866)	38.7 (982)	2260 (1025)
8610	55.5 (1411)	N/A	35.3 (896)	39.8 (1011)	3700 (1678)
9610	55.5 (1411)	N/A	35.3 (896)	39.8 (1011)	3700 (1678)
9832	56.5 (1435)	N/A	35.3 (896)	39.8 (1011)	3720 (1687)

1 - Length measured from flywheel housing to end of output shaft

Notes

Typical Vehicle Applications¹

Articulated Dump, Rigid Dump, Rigid Rear Dump



1 - Contact your Allison representative for other applications.



A World of Support

From our headquarters in Indianapolis, Indiana, USA, to our manufacturing plants in Hungary and India, to approximately 1,600 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 Parts™.

Our Promise

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

- 100+ years of engineering advanced propulsion solutions
- Trusted by more than 350 OEMs worldwide
- A strong history of innovation with more than 1,100 patents
- Over seven million fully automatic transmissions delivered

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