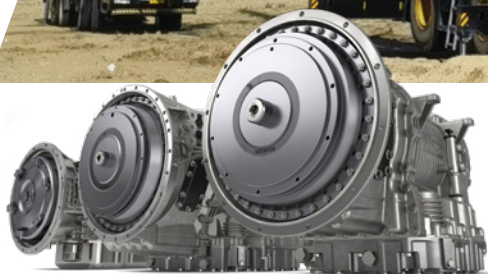




Specialty



When the Going Gets Tough





# Allison Specialty Series™ Transmissions Are Designed for Unique Applications in Defense, Support, Cargo + More

## You Need an Allison

This is the real world, where performance is the only thing that matters. That's why we design every Allison transmission to succeed in the harshest conditions, where and when it matters most. When you're under pressure on the highway, dirt road or no road at all, Allison Transmission's Specialty Series™ fully automatic transmissions are built to meet the challenge every time.

## The Strongest Transmissions for Demanding Situations

Allison Specialty Series™ transmissions provide extended torque range, higher gross vehicle weight (GVW) capacity and advanced electronic controls to get the most performance out of higher horsepower engines while putting more control into your hands and the wheels.





REDUCE  
DOWNTIME  
+ INCREASE  
PRODUCTIVITY

## Proven Reliability + Durability

You're what drives us. When it comes to getting the job done, Allison transmissions are purpose-built to deliver unrivaled reliability and durability while protecting the vehicle driveline. Our propulsion solutions are proven to reduce downtime and increase productivity. When you factor in all life cycle costs and improved productivity, an Allison Automatic costs less per mile to operate than comparably equipped vehicles.



# Making the Grade

Allison Specialty Series™ transmissions are superior when it comes to gradeability and startability, but that's just the start. Count on Allison to deliver:

- Faster acceleration and increased productivity
- Improved maneuverability for soft soil, tight spaces and everything in between
- Enhanced control on steep grades
- Easier operation for less experienced drivers, expanding your driver pool
- Available with engine-driven Power Take-Off (PTO)





## Hareket Trusts Allison to Get the Job Done

Allison Specialty Series™ transmissions are built for the toughest jobs. When Hareket, a heavy lifting and project transportation company, needed a transmission with the power, reliability and durability to haul loads up to 480 tons, they chose an Allison. With more uptime, smoother operation and the ability to face tough terrain, the Allison Specialty Series is purpose-built for success.

Scan the QR code below to read Hareket's full testimonial







Prognostics

PTO Enable

Auxiliary Function Range Inhibit

## Smart Controls

Allison Specialty Series™ transmissions deliver power and intelligence. Our Next Generation Controls assist in even the harshest driving conditions, providing tailored operation and optimized performance for the jobs of today and tomorrow.

**Prognostics** – Allison prognostics monitor transmission operation, eliminating unnecessary oil and filter changes and providing maximum transmission protection.

**Manual Gear Select** – Manually control upshifts and downshifts, if you prefer, when driving in rough terrain.

**Secondary Shift Schedule** – Allows drivers to select between two pre-programmed shift patterns.

**Fourth Lock Up Pump Mode** – Provides simple split-shaft PTO operation.

**Engine Brake Enable** – Smart electronics recognize the most efficient times for engine brake application.

**Retarder Enable** – Helps the vehicle to slow down with less wear on the braking system.

**Auxiliary Function Range Inhibit** – Prevents the vehicle from shifting into range unless the service brakes are applied.

**PTO Enable** – Commands how and when the PTO engages and monitors operating conditions to minimize potential damage and hazards.

**Shift Energy Management (SEM)** – Provides better engine/transmission integration to optimize the entire driveline system.



## The Fully Automatic Advantage

Allison's torque converter smoothly multiplies engine torque, delivering more power to the wheels. By multiplying the engine power, drivers get increased performance, faster acceleration and greater flexibility. Our fully automatic transmission's uninterrupted shifts maintain power when accelerating, allowing for faster acceleration even with a smaller engine.

Our patented Continuous Power Technology™ delivers smoother operation for superior vehicle control. Automated manual transmissions (AMTs) are torque-limited at vehicle launch and interrupt torque/power flow during range shifts leading to less efficiency and a greater potential for wear, especially under harsh duty-cycle operations. An Allison Automatic uses the full torque from the engine and multiplies it with the torque converter, significantly increasing startability without damaging the transmission or drive train, leading to improved total cost of ownership.





Specialty 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)
1000 SP	Close	Yes	340¹ (254)¹	660¹ (895)¹	950 (1288)	300 (224)	575 (780)	850 (1152)	22,000 (10,000)	26,000 (11,800)
1350 SP	Close	Yes	340¹ (254)¹	660¹ (895)¹	950 (1288)	300 (224)	575 (780)	850 (1152)	22,000 (10,000)	30,000 (13,600)
2100 SP	Close	No	340¹ (254)¹	700¹·² (950)¹·²	950 (1288)	300 (224)	575 (780)	850 (1152)	26,500 (12,000)	26,500 (12,000)
2200 SP	Close	Yes	340¹ (254)¹	700¹·² (950)¹·²	950 (1288)	300 (224)	575 (780)	850 (1152)	26,000 (11,800)	26,000 (11,800)
2350 SP	Close	Yes	340¹ (254)¹	700¹·² (950)¹·²	950 (1288)	300 (224)	575 (780)	850 (1152)	30,000 (13,600)	30,000 (13,600)
2500 SP⁶	Wide	No	340¹ (254)¹	700¹·² (950)¹·²	950 (1288)	300 (224)	575 (780)	850 (1152)	33,000 (15,000)	33,000 (15,000)
2550 SP	Wide	Yes	340¹ (254)¹	700¹·² (950)¹·²	950 (1288)	300 (224)	575 (780)	850 (1152)	30,000 (13,600)	30,000 (13,600)
3000 SP - Specialty/Military	Close	No				350 (261)	1050 (1424)	1700 (2305)	-	-
3200 SP - Specialty/Military	Close	No				450 (336)	1250 (1695)	1700 (2305)	-	-
3500 SP - Specialty/Military	Wide	No				330 (246)	985 (1335)	1500 (2034)	-	-
4000 SP - Specialty/Military	Close	No				650 (485)	1950 (2644)	2800 (3795)	-	-
4430 SP - Specialty/Military	Wide	No				380 (283)	1180 (1600)	2600 (3525)	-	-
4500 SP - Specialty/Military	Wide	No	605 (451)	1850 (2508)⁵	2600 (3525)	605 (451)	1770 (2400)	2600 (3525)	-	-
4700 SP - Specialty/Military	Deep	No				605 (451)	1850 (2508)	3000 (4067)	-	-
4800 SP - Specialty/Military	Deep	No				800 (597)	1950 (2644)	3000 (4067)	-	-
5620 SP - General³	-	No				600 (447)	1875 (2542)	3475 (4711)	-	-
5620 SP - Agricultural Tractor	-	No				500 (373)	1650 (2237)	3120 (4230)	-	-
5620 SP - ARFF⁴	-	No				750 (559)	2500 (3390)	3790 (5139)	-	-
6620 SP - General	-	No				760 (567)	2500 (3390)	3790 (5139)	-	-
6620 SP - Agricultural Tractor	-	No				700 (522)	2000 (2712)	3340 (4528)	-	-
6620 SP - ARFF⁴	-	No				1025 (764)	3300 (4474)	5200 (7050)	-	-
6625 SP - General	-	No				760 (567)	2500 (3390)	3790 (5139)	-	-
6625 SP - Agricultural Tractor	-	No				700 (522)	2000 (2712)	3340 (4528)	-	-
6625 SP - ARFF⁴	-	No				1025 (764)	3300 (4474)	5200 (7050)	-	-
8610 SP - General	-	No				1050 (783)	3600 (4881)	5650 (7660)	-	-
8610 SP - Agricultural Tractor	-	No				850 (634)	3200 (4339)	5300 (7186)	-	-
9610 SP	-	No				1350 (1007)	4000 (5423)	6000 (8135)	-	-

1 - Check with your OEM to ensure offerings    2 - Only available in gears three through five    3 - Straight-Thru and Dropbox    4 - Aircraft Rescue + Fire Fighting (ARFF) vehicle    5 - Ratings shown for gears 2-6 only    6 - Available with xFE

Gear Ratios Torque Converter Multiplication Not Included

Model	First	Second	Thirð	Fourth	Fifth	Sixth	Seventh	Eighth	Reverse	2nd Reverse
1000¹/1350¹/2100¹/2200¹/2300² 2350¹/B 210¹/B 220¹	3.10:1	1.81:1	1.41:1	1.00:1	0.71:1	0.61:1	N/A	N/A	-4.49:1	N/A
2500¹/2550¹/2575	3.51:1	1.90:1	1.44:1	1.00:1	0.74:1	0.64:1	N/A	N/A	-5.09:1	N/A
3000/3200/B 295/B 300/B 400	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	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
4700/4750/4800/4850	7.63:1³	3.51:1	1.91:1	1.43:1	1.00:1	0.74:1	0.64:1	N/A	-4.80:1	-17.12:1⁴
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
9832	3.75:1	2.69:1	2.20:1	1.77:1	1.58:1	1.27:1	1.00:1	0.72:1	N/A	N/A

1 - Available with xFE    2 - Check with your OEM to ensure offerings    3 - Manually selected first gear    4 - SEM/LRTP or LRTP only is required

Specialty Series™ Physical Description 1000-4000 Series

Model	Length¹	Depth² w/ Deep Oil Pan/Sump	Depth² w/ Shallow Oil Pan/Sump	Dry Weight
	in (mm)	in (mm)	in (mm)	lbs (kg)
1000/2000³				
SAE No. 3 Mounting	28.02 (711.7)	11.22 (285.1)	10.71 (272.0)	323 (146.5)
SAE No. 2 Mounting	28.40 (721.2)	11.22 (285.1)	10.71 (272.0)	323 (146.5)
3000				
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)
3700				
Basic Model	51.58 (1310.3)	21.90 (555.0)	N/A	1170 (530)
4000⁴/4430⁵/4500				
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 - 2000 SP - Only 2000 model available with shallow oil pan  
4 - 4000 SP - Available with deep oil pan only    5 - 4430 is an SP model only - Available with deep oil pan only

Specialty Series™ Physical Description 5000-9000 Series

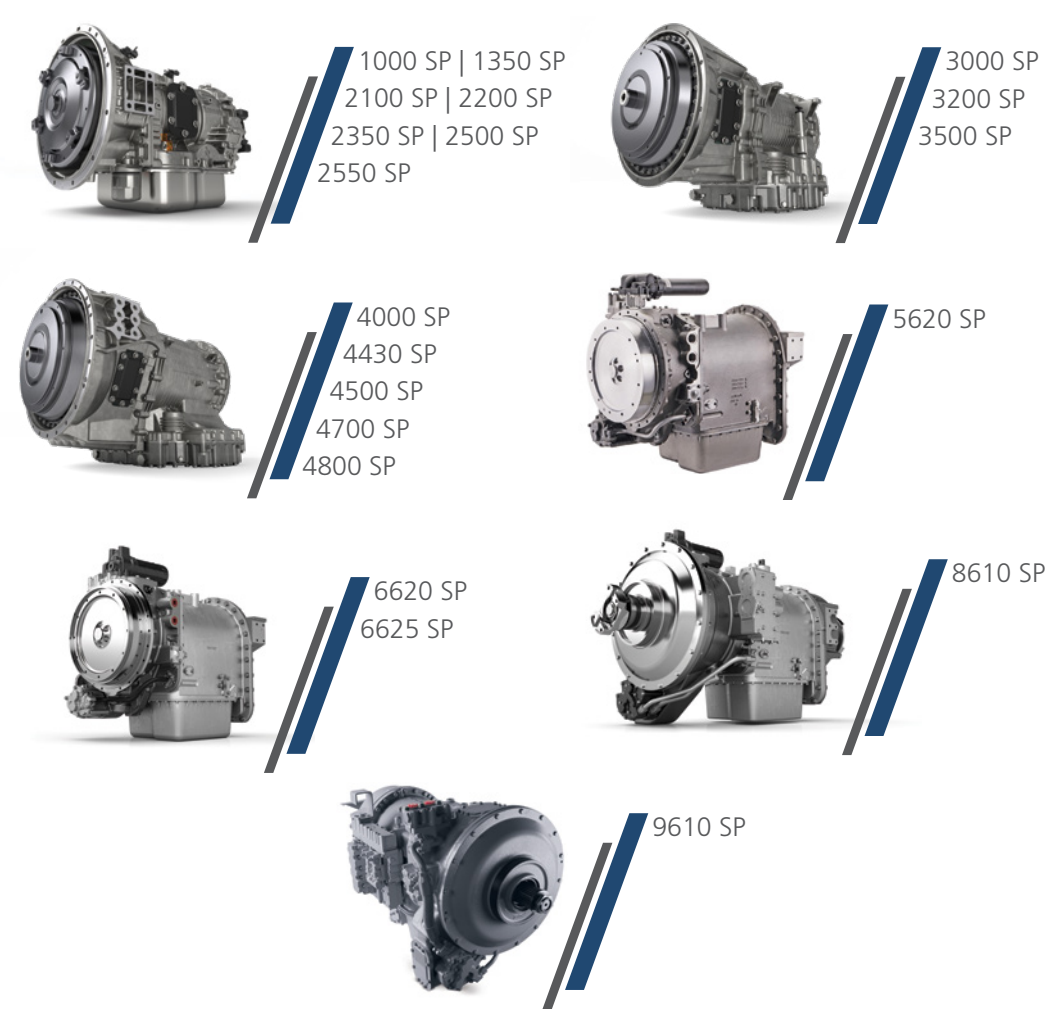
Model	Length¹ w/o Retarder	Length¹ w/ Retarder	Depth (Basic Model)	Depth w/ Direct Mount Filters	Dry Weight
	in (mm)	in (mm)	in (mm)	in (mm)	lbs (kg)
5620	43.1 (1095)	46.6 (1182)	31.0 (788)	35.6 (904)	2220 (998)
5620 w/ Dropbox	46.7 (1185)	50.1 (1273)	40.7 (1034)	45.3 (1150)	2750 (1247)
6620/6625	43.1 (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)

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

Notes

Typical Vehicle Applications

Military, Crane Carrier, Equipment Hauler (with Escort or Permit), Molten Metal/Slag Hauler, Power Plant Generator Hauler, Heavy Equipment Hauler



Features + Advantages

**Shift Energy Management (SEM) + Low Range Torque Protection (LRTP) Torque Limits:**  
Ratings up to 340 hp/660 lb-ft on 1000 and 1350 SP  
Ratings up to 340 hp/700 lb-ft on 2100, 2200, 2350, 2500, 2500 xFE & 2500 SP  
Ratings up to 450 hp/1250 lb-ft on 3000, 3200 and 3500 SP  
Ratings up to 605 hp/1950 lb-ft on 4000, 4430, 4500 and 4700 SP  
Ratings up to 800 hp/1950 lb-ft on 4800 SP

**DynActive® Shifting**  
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**  
Limits vehicle acceleration to mitigate aggressive driving by controlling engine torque.

**Prognostics**  
Eliminates unnecessary oil and filter changes by monitoring various operating parameters to determine and alert when a specific maintenance function is required. Additionally, prognostics monitor transmission health to provide warning of potential failure and prevent unscheduled downtime.





## A World of Support

From our headquarters in Indianapolis, Indiana, USA, to our manufacturing plants in Hungary and India, to more than 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 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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