



Innovative AGV Wheel Drives



SU SERIES Modular AGV Subassemblies

***NIDEC-SHIMPO** has earned a solid reputation within the robotics sector as the leader in high volume, high precision, gearbox and motor technologies. Our deep partnerships and long history within the industry have given us extensive expertise at developing wheel-drive transmission assemblies for AGV's and mobile service robotics.*

NIDEC-SHIMPO CORPORATION

SU SERIES

Compact Drive Assemblies for AGV OEM's

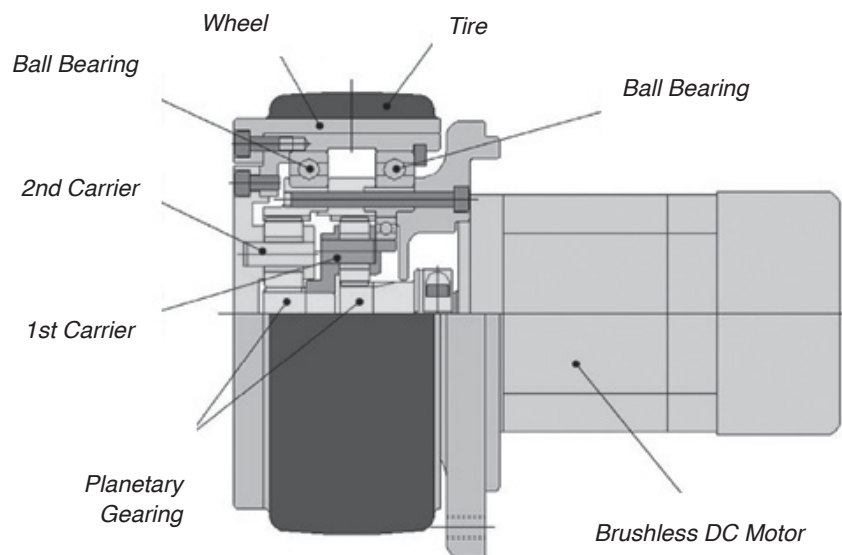
Utilizing our strong expertise in mobile robotics applications, Nidec-Shimpo has developed a modular OEM drive package offering. We leverage the large variety of high-volume BLDC motors manufactured by the Nidec Group that offer low-rotor inertia, fast dynamic response, and high torque in order to deliver the most compact wheel drive package for each customer's application.

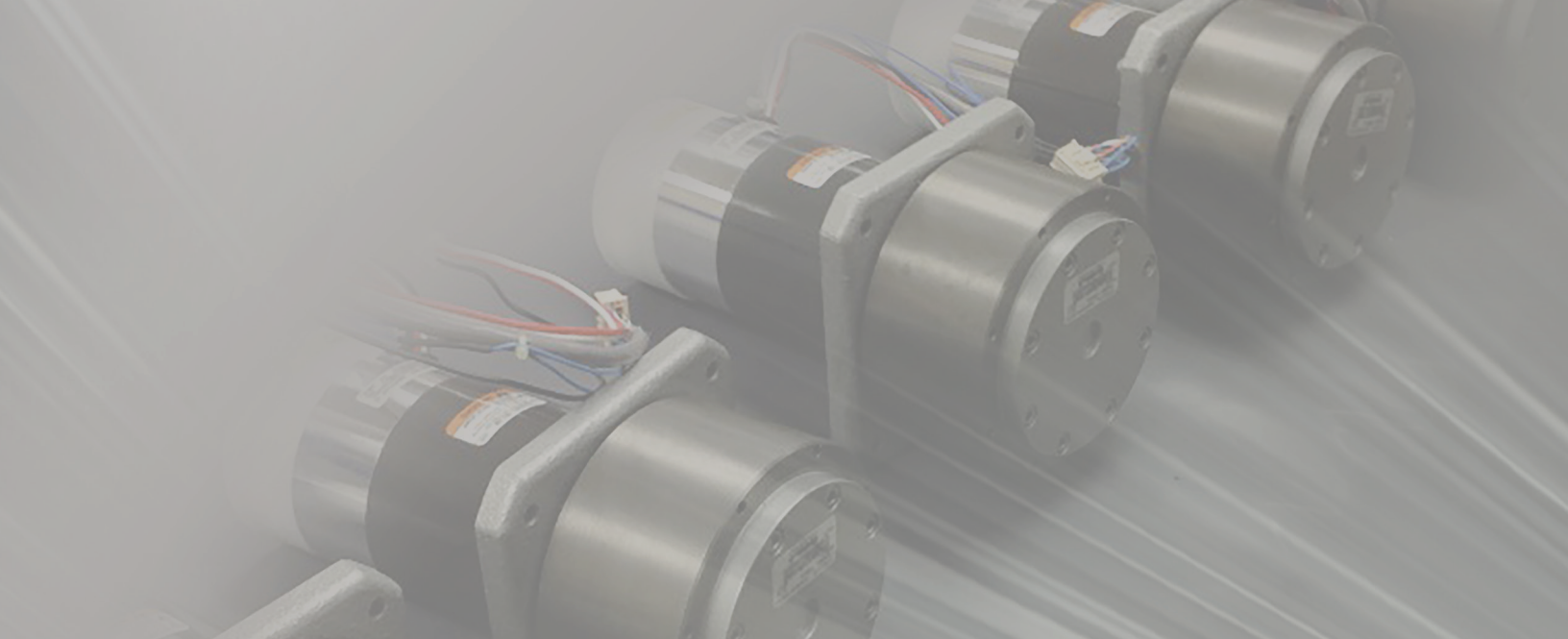
SU Drive Pack Features

- Extremely compact, in-hub planetary design
- Bearing and internal structure are ideal for industrial environments
- Standard design utilizes a 200 W or 400 W BLDC Nidec motor with either 9:1, 21:1 or 28:1 reduction ratios
- Optional Differential encoders and brakes can be added to the motor
- Ancillary items for mounting the wheel drive, housing the control, or cable management are available



SU Drive Pack Diagram





SU Drive Pack Offering

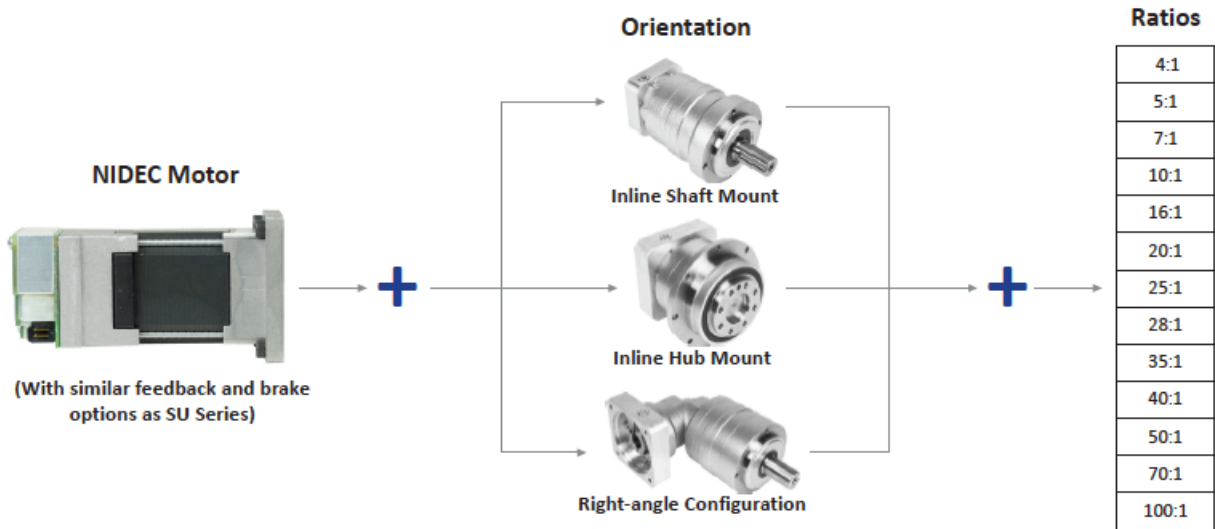
SU Drive Pack Options: Wheel or wheel + tire, differential encoder or encoder with index, thermistor, brake.

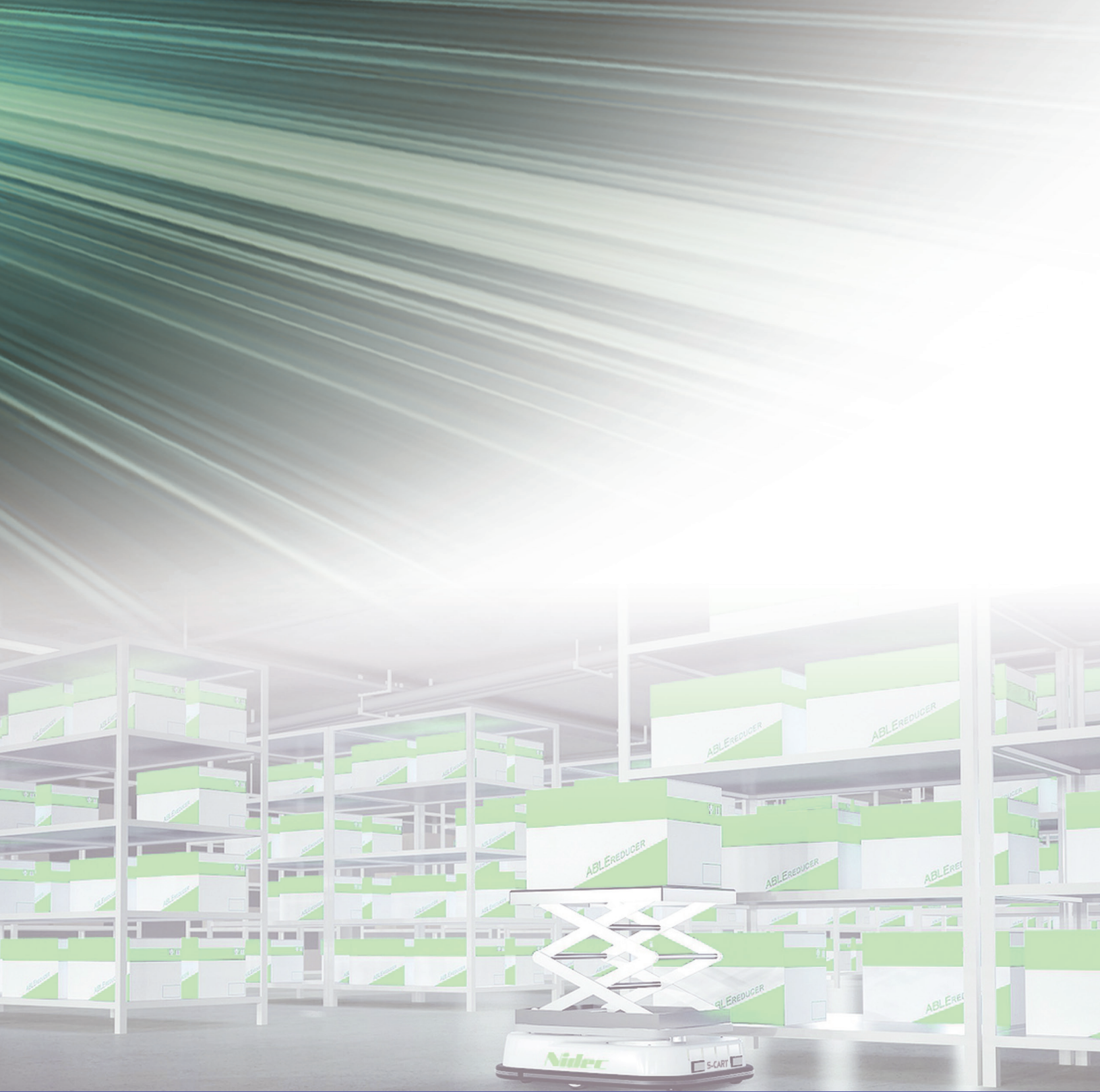
Series	Control Method		Operating Mode		Encoder		Thermistor		Rated Power		Input Voltage		Gear Reduction		Frame Size		Wheel		Brake	
SU	A	External Feedback Only	0	Standard	0	None (Hall Sensors Only)	0	None	1	200 Watt	48	48 Volt	009	9:1	C	C-Frame	0	None	0	None
				1	100 ppr	1	yes	2	400 Watt	24	24 Volt	021	21:1			1	Wheel 21:1	1	Brake (Normally Closed)	
				2	250 ppr					028	28:1	2	Wheel 28:1							
				3	400 ppr					3	Wheel: 150 mm dia. tire									
				4	1000 ppr					4	Wheel: 200 mm dia. tire									
				5	256 ppr/index					5	Wheel: 152 mm dia. tire									

Wheel with 150 mm dia. tire only available with 21:1. Wheel with 200 mm dia. tire only available with 28:1 wheel with 152 mm dia. tire only available with 9:1.

Other Combinations

Nidec-Shimpo manufactures a complete offering of planetary gearboxes, including a wide variety of reduction ratio possibilities. Contact us if your wheel drive package requires a different ratio or configuration.





Nidec