

# DRIVINGROBOT

Whether you're testing passenger vehicles or heavy-duty trucks, our DrivingRobot modular (DRm) line provides a powerful, easy-to-install solution for ADAS and autonomous vehicle development. With three specialized versions — DRm45b™, DRm60™, and DRm150™ — the DRm family covers the full range of vehicle types and testing demands.

Designed with speed, safety, and ease of use in mind, the DRm can be installed in just 20–30 minutes using only one tool or no tools at all. Its modular structure allows for quick switching between test vehicles, without the need to remove airbags or steering wheels. Electronics and battery units are securely mounted using ISOFIX or seatbelt systems, ensuring both safety and convenience. The following page gives an overview of the three available versions — DRm150™, DRm60™, and DRm45b™ — to help you find the right fit for your testing needs.

## DRm150™ – For Heavy-Duty Vehicle Testing

Designed specifically for buses, commercial vehicles, and trucks, the DRm150™ delivers high torque (150 Nm) and robust performance in demanding test environments. Its modular design ensures simple installation while maintaining the control and precision needed to meet the most rigorous testing protocols — including NCAP Truck Safety and NHTSA FMVSS 127.



- Powerful SRm150 steering robot for high-torque applications
- Mounts quickly with ISOFIX or seatbelt system
- Ideal for emergency braking, tight turns, and high-speed tests
- Seamless integration with UFObase

## DRm60™ – For Passenger Vehicle and Van Testing

The DRm60™ is the versatile solution for cars, SUVs, and light commercial vehicles. With a 60 Nm steering motor (SRm60) and adjustable components, it combines ease of use with testing precision.



- Tool-free mounting of steering robot onto pre-centered adapter
- Split design allows multiple Vehicle Under Tests (VUTs) to be prepped in parallel
- Seamless integration with UFObase

## DRm45b™ – Compact and Proven

Formerly known as the DRc, the DRm45b™ is our compact solution for passenger vehicle testing. All components are integrated into a single compact system that installs behind the original steering wheel — maintaining airbag functionality and driver comfort.

- Integrated design with minimal intrusion
- ISOFIX-mounted electronics box
- Ideal when space is limited or quick deployment is needed
- Seamless integration with UFObase



# DRIVINGROBOT

## Modular Components for Custom Testing Needs

All DRm versions share a modular structure that allows tailored configuration:

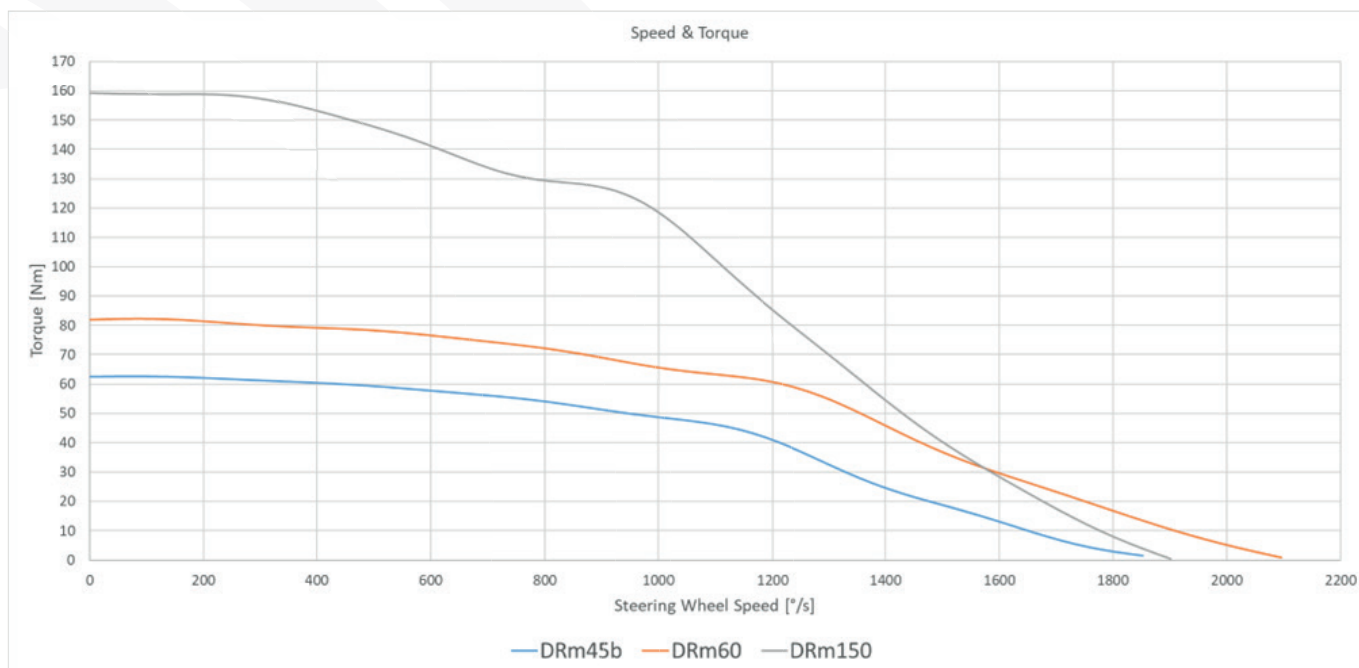
**SRm Steering Robots (SRm45b / SRm60 / SRm150):** Choose based on torque requirements and space constraints.



**Steering Wheel Adapter:**  
Fits wheels between 330–550 mm, with tool-free setup and fast alignment.



**PRm Pedal Robot:** Mounts securely to seat rails, allowing full foot space and easy adjustment. Use independently or combined with steering control.



# DRIVINGROBOT

		DRm45b™	DRm60™	DRm150™
ROBOT CONTROL	Power Supply	48 V battery system, 760 Wh	48 V battery system, 760 Wh	48 V battery system, 760 Wh
	Signal Channels and Interfaces	CAN, RS232, Ethernet	CAN, RS232, Ethernet	CAN, RS232, Ethernet
	Sampling Frequency Range	100 Hz	100 Hz	100 Hz
	Compatibility	Humanetics UFO target carrier products (third party systems on request/interfaces)	Humanetics UFO target carrier products (third party systems on request/interfaces)	Humanetics UFO target carrier products (third party systems on request/interfaces)
	Power-Off Protection	Dedicated battery system	Dedicated battery system	Dedicated battery system
	Screen	Tablet PC for in-car use	Tablet PC for in-car use	Tablet PC for in-car use
BRAKE PEDAL ACTUATOR	Drive Mode	Brushless electric motor	Brushless electric motor	Brushless electric motor
	Max Torque	60 Nm at 400%/s	78 Nm at 400 %/s	150 Nm at 400%/s
	Max Velocity	1740 %/s at 5 Nm	2000%/s at 5 Nm	1840%/s at 5 Nm
	Rotational Inertia	0,0656 kgm <sup>2</sup> incl. Ring guide		
	Steering Wheel Diameter	329-389 mm	330-510 mm	330-510 mm
	System Angle Control Accuracy	+/- 0.5°	+/- 0.5°	+/- 0.5°
	Control Mode	Path following, wheel angle control, steering wheel angle control, friction compensation	Path following, wheel angle control, steering wheel angle control, friction compensation	Path following, wheel angle control, steering wheel angle control, friction compensation
	Space Behind Steering Wheel	For fixation of clamps	no limitations	no limitations
	Space in front of Steering Wheel	no limitations	60 mm required	60 mm required
THROTTLE PEDAL ACTUATOR	Max Continuous Pedal Force	56 N	56 N	56 N
	Max Throttle Pedal Force	156 N	156 N	156 N
	Max Throttle Pedal Speed	1 m/s	1 m/s	1 m/s
	Max Stroke	104 mm	104 mm	104 mm
	Control Mode	Speed Control, Position Control, Force Control	Speed Control, Position Control, Force Control	Speed Control, Position Control, Force Control
BRAKE PEDAL ACTUATOR	Security	Safe Design – driver can overrule the brake and take over control at any time	Safe Design – driver can overrule the brake and take over control at any time	Safe Design – driver can overrule the brake and take over control at any time
	Drive Mode	Brushless electric motor	Brushless electric motor	Brushless electric motor
	Max Braking Force	1000 N (depending on mounting angle)	1000 N (depending on mounting angle)	1000 N (depending on mounting angle)
	Max Velocity	1 m/s	1 m/s	1 m/s
	Max Stroke	140 mm (depending on mounting angle)	140 mm (depending on mounting angle)	140 mm (depending on mounting angle)
	Control Mode	Speed Control, Position Control, Force Control	Speed Control, Position Control, Force Control	Speed Control, Position Control, Force Control