LSPlus Series Vs LS Series

Feature	LS Series	New LSPlus Series	Impact on Applications & Customers
Speed Accuracy	0.2% (LS1 from 40mm/min, LS5 from 20mm/min)	0.1% (LS1 Plus from 0.1mm/min, LS5 Plus from 0.01mm/min)	Higher precision data for all applications. - Most materials are strain rate dependent meaning that test speed will affect the load readings. More accurate speed mean more accurate load readings.
Speed Range	0.01 to 1016 mm/min	0.001 to 2032 mm/min	Wider range of testing speeds allows for broader material characterization. – Slow speed for testing on engineered components. The high speed enables high return speed to allow greater testing throughput
Extension Resolution	0.15 microns	0.04 microns	Significantly improved measurement resolution for crosshead displacement. This allows the motion control electronics to control the speed with higher accuracy and smoothly across the whole range.
Load Resolution		Min. 1 part in 10^9	Excellent load resolution allows calibration across a wider range of forces, reducing the need for multiple loadcells.
A/D Converter		New 32-bit with improved accuracy	Increases load resolution for calibration across a wider range of forces reducing the need for multiple loadcells
Strain Rate Control	Not supported	Supported	Enables testing under constant strain rate, a requirement for ISO plastic tensile tests. - Expands testing capabilities to meet industry standards. - Valuable for R&D and quality control in the plastics industry.
Control Interface	Nexygen Plus or main console (limited functionality)	Nexygen Plus or LS Plus tablet	Tablet interface with wide range of applications, tension, compression and cycling. Data output and reports. Enhances user experience and simplifies test setup for R&D and quality control labs.
Low Speed Performance	Limited	Significantly improved	New motion control system means LS1 can now be used for slow speed applications, no need to upgrade to LS5.
Cycling Performance		Improved cycling reaction and turnaround time	Faster response changes in direction or speed. More accurately follows the test procedure.
Load Holding		Improved	More precise and stable load control. - Ensures accurate data during static load tests. - Benefits R&D, quality control, and manufacturing by providing consistent test results.

LLOYD™ materials testing