STRONGARM™ LE100 ELECTRO-HYDRAULIC TOOL

1. The tool is a hydraulically activated piston with two equal, opposite blade arms that are symmetrically opened by mechanical joints, thereby spreading, squeezing or cutting objects.

2. Electro-hydraulic devices do not need to be connected to an external hydraulic source, generation of the required hydraulic pressure takes place within the body of the device by either a quick exchange lithium-ion battery or an external power supply.

3. The cylinder of the tool shall be made of anti-corrosive light aluminum alloy for its lightweight, strength and long life. The body of the tool shall have a high impact, non-metallic housing. The housing shall have ventilation holes on both sides of the unit for cooling the motor.

4. The NFPA HSF test point shall produce 6,744 lbf (30 kN), and the LSF test point shall produce 5,395 lbf (24 kN).

5. The tool shall produce a spreading distance up to 8.5 in (215 mm) measured at the blade tips with spreader tips.

6. The tool shall be able to utilize two different style of tips that can be exchanged quickly by the use of 1in. diameter quick release buttons. One set of tips are patented multifunctional tips that can be used for spreading, peeling, and squeezing without the need to be changed. These tips should be 1.772 in. wide measured at the base of the tip. The second set of tips shall be manufactured from cast high-strength steel. These tips must have 3 “teeth” on one tip and 2 “teeth” on the second tip. These “teeth” should be 0.975 in. each and form an interlocking “Jaw” the can be used to force items open as well as lift. Both tip types shall be made of an investment cast high-strength tool steel.

7. The tool has been NFPA tested to cut 0.87 in (22.2 mm) diameter round stock steel material.

8. The maximum cutter opening shall be 8.15 in (215 mm) and shall include a notch to focus maximum cutting force.

9. The blades of the tool shall be of a straight serrated edge design for maximum cutting performance.

10. The control mechanism shall feature a star-grip control actuator for ease of operation by allowing 360° operation in any position. The tool must provide a non-interflow shear seal “dead man” actuator, whereby the unit stops functioning when thumb pressure is released. The star grip automatically returns to the central/neutral position, guaranteeing full load-holding.

11. The tool shall have a 360° rotating handle that offers 4 locking positions.

12. The tool shall have a built in Picatinny accessory rail for the addition of optional accessories.

13. The tool shall feature an on/off button that stays recessed when the tool is in the on position.

14. The tool will be equipped with a dual pilot check valve. This is to prevent accidental movement of the arms in the event of power loss.

15. The tool shall be protected by a pressure relief valve that prevents it from being over pressurized.


17. Minimum current consumption is 10 amps at idle mode and 43 amps at maximum load. The nominal electrical voltage (with lithium/ion battery) is 25.2 V.

18. The tool shall be able to tolerate an ambient temperature range of -4°F (-20°C) up to +131°F (+55°C).


20. The tool, including battery, shall complete at least 5 full open/close cycles to full pressure a minimum of 30 minutes after being exposed to an ambient temperature of 300° for 7 minutes.

21. The tool dimensions without the battery shall not be any longer than 31.3 in (796 mm), wider than 7.7 in (195 mm) or higher than 8.3 in (210 mm) with spreader tips.

22. The tool must be certified as compliant with NFPA 1936, 2015 Edition and shall be labeled as such bearing the mark of the testing agency.

23. Cutting classification should be no less than A5 / B3 / C5 / D6 / E6 as defined in NFPA 1936:2015 and certified by a 3rd party testing agency.

24. The tool will not weigh more than 24.3 lbs (11 kg) with combi tips, excluding the power supply.