

Lithium Ion Battery Powered Hydraulic Ram Specifications

- The tool consists of multi-stage piston and cylinder arrangement that is hydraulically operated. Hydraulic pressure is applied to piston rods to push or spread objects.
- Hydraulic power for the tool is generated internal to the tool via a hydraulic pump that is operated by an electric DC motor. The DC motor is powered by 60V Lithium ion battery or an external AC to DC power supply.
- The cylinder, body and housing of the tool shall be made of aluminium alloy for its lightweight, strength and durability. The housing that encloses the motor, pump, and electronics shall not be constructed of plastic or other non-metallic materials due to the inferior durability and heat dissipation properties of these materials.
- The ram shall extend to a distance of up to 22.6 inches (574 mm). The retracted length shall be no more than 11.4 inches (290 mm) to allow the tool to fit into tight spaces. For additional spreading capacity the tool should be designed to accept optional, quick attach, lightweight aluminium extensions. Optional extensions shall be 10 inches, 18 inches and 27 inches in length. With the longest extension installed the ram shall have a maximum spreading distance of up to 49.6 inches (1260 mm).
- The ram shall feature a two stage of extension. The maximum stroke for the first stage shall be 6.3 inches (160 mm). The Highest Spreading Force (HSF) for the first stage shall be no less than 48,360 lbf (215.1 kN). The maximum stroke for the second stage shall be 4.9 inches (124 mm). The Lowest Spreading Force (LSF) for the second stage shall be no less than 17,170 lbf (76.4 kN). The combined overall stroke of both stages shall be 11.2 inches (284 mm).
- The tool shall include a pilot check valve to prevent accidental movement of the pistons in the event of power loss.
- The tool must include a “dead man” actuator, whereby the unit stops functioning when the operator releases hand or thumb pressure from the actuator. The actuator shall possess a stainless steel guard plate to reduce or eliminate accidental or unwanted activation of the mechanism.
- The tool shall be protected by a pressure relief valve that prevents over pressurization.
- The tool shall have a pressure port that allows a technician to check the output pressure of the pump during routine maintenance.
- The maximum nominal operating pressure of the tool will be 10,152 psi (700 bar).
- The nominal electrical voltage supplied by the lithium ion battery shall not be less than 60.0 V.
- The tool shall be powered by a non-proprietary 60 volt DeWALT lithium ion battery. Each tool shall be provided with two 60V 6.0 Amp-hr DeWALT batteries and one 110V DeWALT battery charger.
- The battery shall be located on the top of the tool and have a side discharge for easy installation/removal.
- The tool dimensions without the battery shall not be any longer than 17.8 inches (452 mm), wider than 7.3 inches (185 mm) or higher than 11.4 inches (290 mm).
- The tool shall not weigh more than 36.9 lbs (16.7 kg) excluding the battery.
- This tool shall be compliant to NFPA 1936:2015 Edition