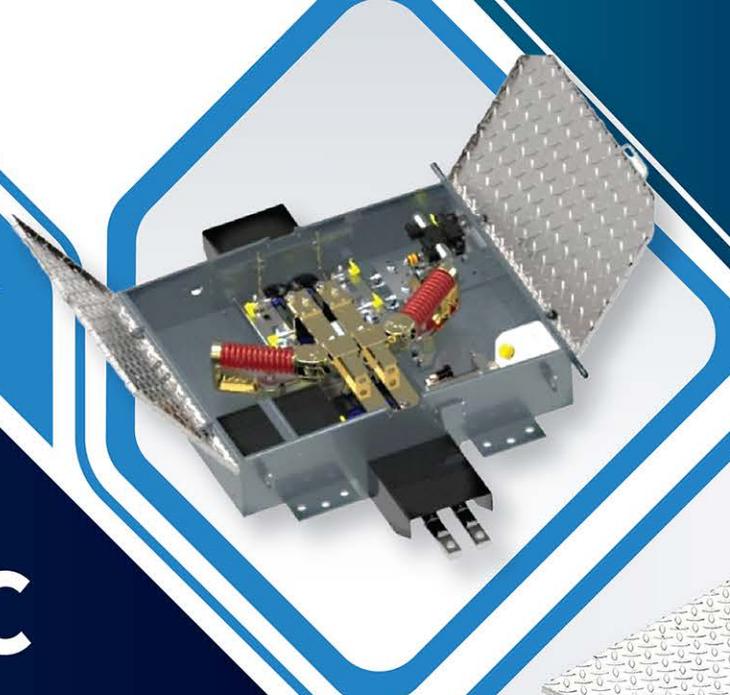


ML-18C

This switch machine system combines trailable design, advanced safety, and remote control for modern mainline dark territory switching.



The ML-18C is Advanced Rail Systems' most advanced electric hydraulic railroad switch, designed specifically for mainline applications where safety, responsiveness, and performance are critical. With redundant connecting rods, proximity sensors, and built-in overthrow and broken rod detection, the ML-18C ensures reliable, damage-free operation—even during a run-through—making it the new standard in modern railroad switching.

- › Trail-able Design up to 40 MPH
- › Redundant Connecting Rods with Fail-Safe Detection
- › Advanced Proximity Sensor
- › Rugged, Low-Profile Hydraulic System



Scan for more...

 sales@advancedrailsystems.com

 (254) 252-3005

 AdvancedRailSystems.com

ML-18C Mainline Power Switch Machine

Physical characteristics

PARAMETER	SPECIFICATION
Length	53.6" (136.1cm)
Width	47.5" (120.6cm)
Height	8.8" (22.3cm)
Weight	680Lb (308Kg)
Throw Length	3.0" - 6.0" (76 - 152cm)
Spring Holding Force	1,600Lbf (7.1kN)

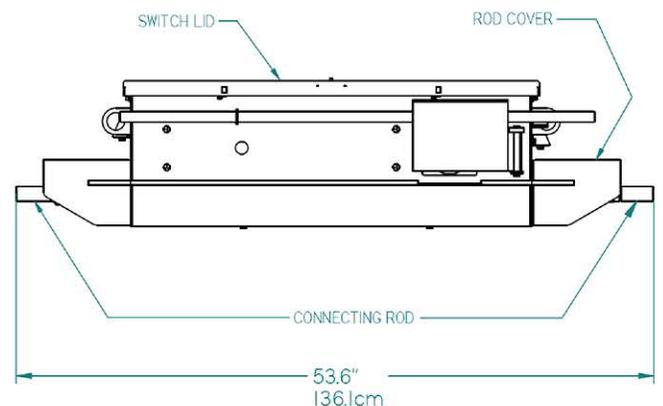
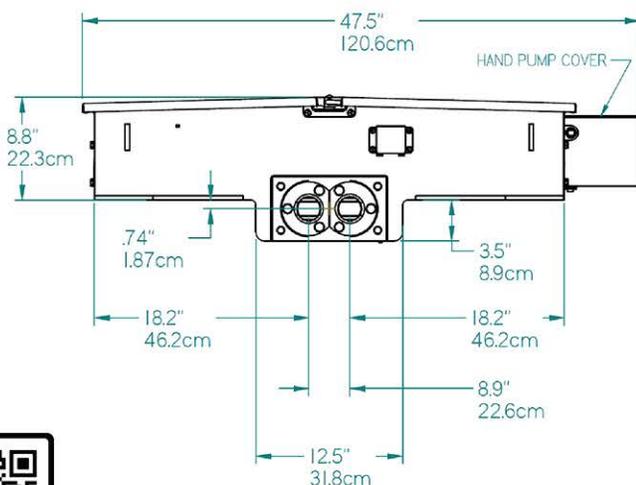
Operating characteristics

PARAMETER	SPECIFICATION
Throw Time	2.5 seconds
Temperature Range	-40°F + 185°F (-40°C + 85°C)
Throw Force	4,500Lbf (19.8kN)
Nominal Hydraulic Operating Pressure	1,100 psi (7.6 MPa)
Switch Control Methods	Remote: control circuits, data/ network communications, or DTMF via VHF/UVF radio Local - Push Button Manual - Hydraulic hand pump

Electrical characteristics

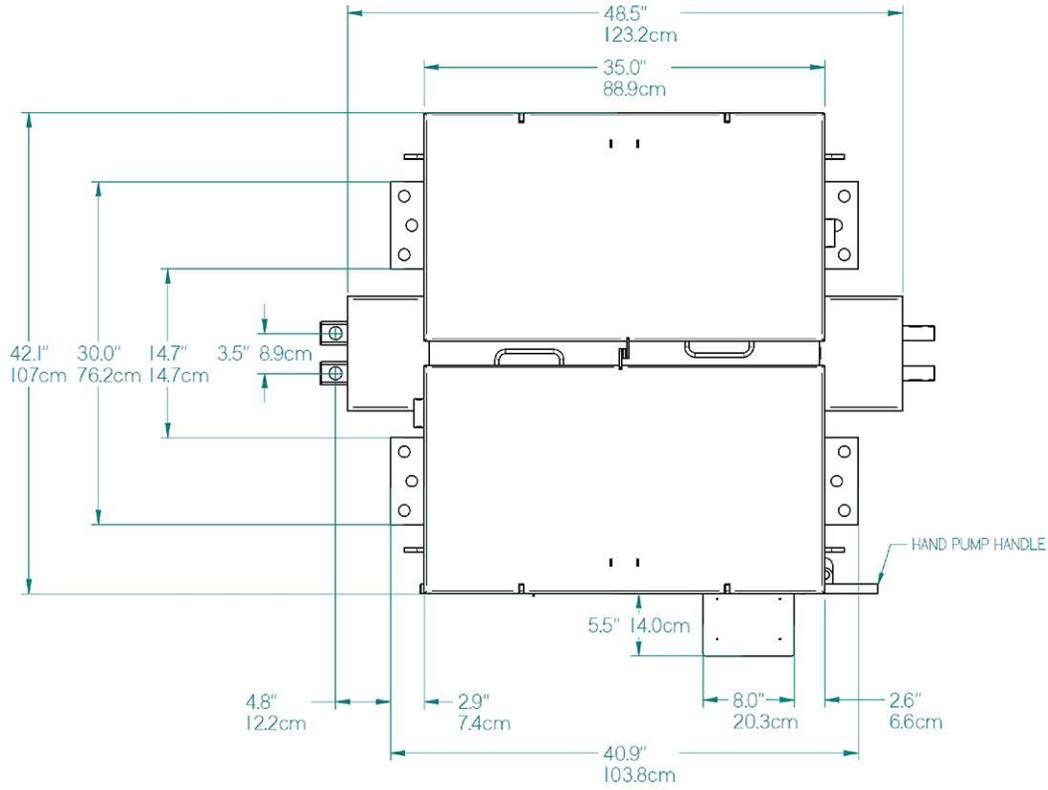
PARAMETER	SPECIFICATION
AGM Battery (heavy duty cycle)	12VDC - 105 Ah
Control Voltage	12 - 24 VDC
Power Options	Solar Panel with Battery Charger AC Battery Charger (110/220V)
Supplied Voltage and maximum current to maintain the battery charged.	110VAC - 60Hz - 2A (Battery charger) 220VAC - 60Hz - 1A (Battery charger) 230VAC - 50Hz - 1A (Battery charger) 12VDC (Solar panel control charger)
Switch Point Detection	<u>Inductive proximity sensors 0-30VDC</u> PNP-NO-12VDC output-3 wires NPN-NO-0VDC output-3 wires <u>Fail-safe inductive sensors 19-30VDC - Option S2</u> PNP-NO-2 x OSSD (A1 & A2) output-4 wires

Switch Front & Side View Dimensions

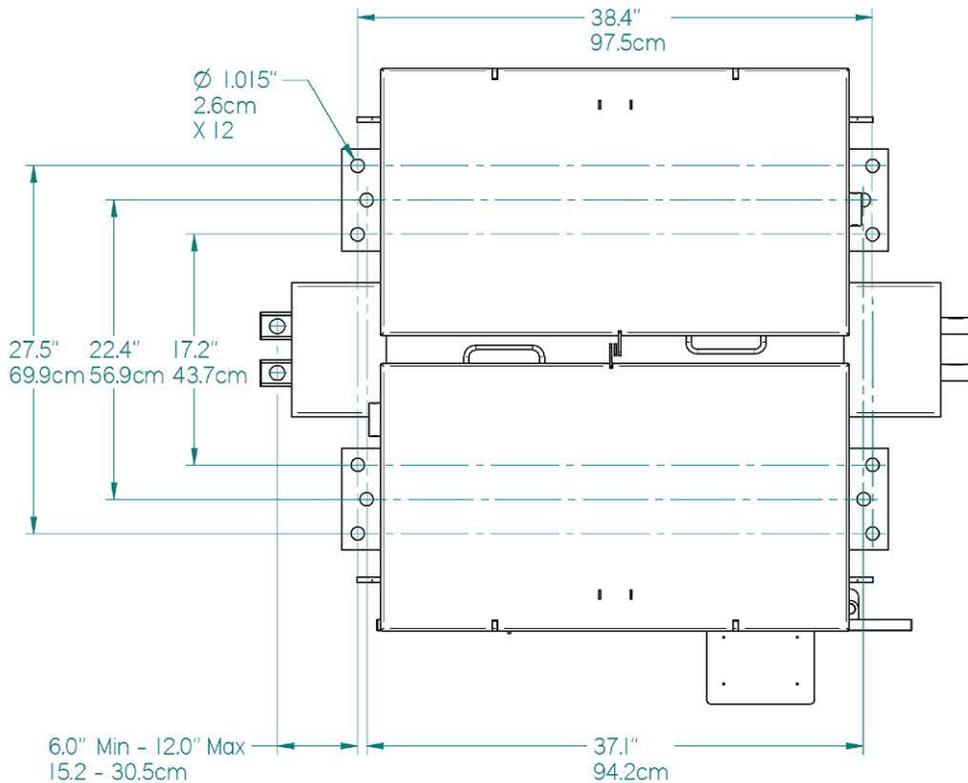


Scan the QR code to find out more about Advanced Rail Systems and the ML-18C Mainline Power Switch Machine.

Switch Top View Dimensions



Switch Foot Print Dimensions





Advanced Rail Systems is the leading U.S.-owned and operated company dedicated exclusively to rail yard automation, offering total package solutions that redefine industry standards. Founded by experts with decades of hands-on experience — from maintaining rail lines to designing advanced automation systems — the company combines deep industry knowledge with cutting-edge innovation. Advanced Rail Systems' comprehensive approach integrates powerful, reliable switch machines and advanced automation technologies to streamline yard operations, enhance safety, and maximize efficiency. Committed to excellence in both product and service, Advanced Rail Systems delivers solutions that drive rail yards forward, setting a new benchmark for performance and support in the railway industry.

**Contact our
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