ML-Series
Solenoid Switches

500A magnetic latching provides switching under load, where manual control is not required

- Silver alloy contacts provide high reliability for switching live loads

- LED output to remotely indicate switch state - requires optional LED or Remote Control Contura Switch with integrated LED (included in retail package)

- 3/8"-16 Tin-plated Copper studs for maximum conductivity and corrosion resistance

- One-piece stainless flange nuts ensure safe and secure connections

- Label recesses for circuit identification

7701

7703

TECH TIP

ML-Series Solenoid & RBS Update

A number of ML-Series Solenoids and Remote Battery Switches are now rated to 64V DC, making them ideal for use in 36V DC and 48V DC nominally-rated systems. The new 64V DC rating applies only to the contact voltage, while maintaining the existing 12V DC or 24V DC control voltage, making them ideal for use in multi-voltage systems like solar or golf-carts. The new higher voltage rating was tested to 2,000 live-switching cycles at maximum operating voltage per UL 1107 requirements.

Remote Control Contura Switch
Included in retail package

Duetch DTM Cable End now offered for both retail and bulk units. Other connector plugs are available for high volume OEM applications.

Related Products

LEDs

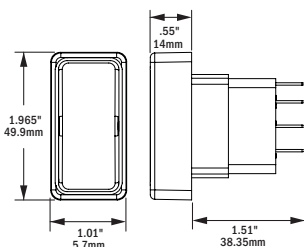Paralleling Link Bus

Stud Mount Insulators

Specs

![Blue Sea Systems logo]

Part #	Contact Voltage	Control Voltage	Signal Voltage	Cable End
7701	0-64V	9-16V	12V Momentary	Stripped Wire
7701100	0-64V	9-16V	12V Momentary	Deutsch DTM
7703	0-64V	18-32V	24V Momentary	Stripped Wire
7703100	0-64V	18-32V	24V Momentary	Deutsch DTM

Wire Size and Current Ratings

Wire Size	Cranking 30 sec.	Intermittent 5 min.	Continuous (UL 1107)
2/0 AWG (70 mm²)	1,000A	400A	225A
4/0 AWG (120 mm²)	1,100A	400A	300A
2× 4/0 AWG (2x 120 mm²)	1,450A	700A	500A

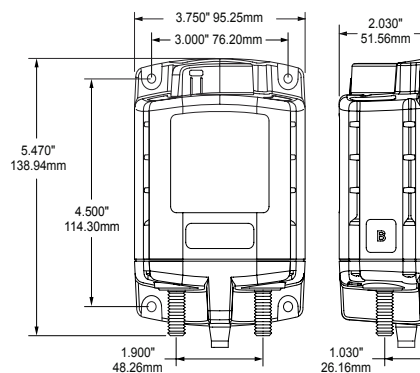## Remote Control Contura Switch (2145, 2155)

Amperage Max. Operating	20A @ 12V DC, 15A @ 24V DC
Amperage Operating Current	18mA
Temperature Range	-40°C (-40°F) to 85°C (185°F)
Pole/Throw	SPDT
Lighting	LED rated 100,000 hours half-life
Seals	Internal and external gasket panel seal
Mounting Hole	1.45" x 0.83" (36.83 mm x 21.08 mm)
Regulatory	Meets UL 1500 and ISO 8846 external ignition protection requirements, Switch front is IP67 when mounted with gasket in place – protected against immersion up to 1 meter for 30 minutes

Selection Chart

![ML Solenoid products]

Part #	7701 7701100	7703 7703100
Nominal Voltage	12V DC	24V DC
Operating Voltage (contacts)	0-64V	0-64V
Control Voltage	9-16V	18-32V
Cranking Rating (30 sec.)	1,450A DC	
Intermittent Rating (5 min.)	700A DC	
Continuous Rating	500A DC	
Amperage Operating Current - continuous @ 25°C nominal VDC	0mA	
Amperage Operating Current - when changing state	< 7.0A DC	< 4.0A DC
Switching Cycles	100,000	
Live Switching Cycles	10,000 @ 12V, 300A 10,000 @ 24V, 150A 2000 @ 48V, 100A	
Control Signal	Momentary	
Coil Function	Magnetic Latching Bi-Stable	
Remote Control Switch Included	2145 SPDT (ON)-OFF-(ON)	
Control Circuit Connection	Tinned Wire or Deutsch Connector	
Mounting	#10 or M5	
Terminal Stud Size	3/8"-16 (M10)	
Terminal Stud Length	7/8" (22 mm)	
Maximum Terminal Stud Torque	140 in-lb (15.5 Nm)	
Cable Size to Meet Ratings	4/0 AWG (120 mm²) × 2	
Terminal Ring Diameter Clearance	1.12" (28.4 mm)	
Weight	2.03lb (0.92 kg)	
Regulatory	CE marked, meets ISO 8846 and SAE J1171 external ignition protection requirements IP66 - protected against powerful water jets	

Specifications subject to change. See bluesea.com for current information.

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