

# CSW-Series

Combination Switch

[PRODUCT WEBPAGE](#)

*request sample, configure part*



The CSW-Series is a versatile combination switch featuring a multi-position rotary, a three-position lever, and momentary pushbutton functions. This compact switch offers superior current ratings, IP67 sealing protection, customizable legends and it is compatible with a variety of popular connectors.

**1**

Pole

**10-15**

Amps

**12**

VDC

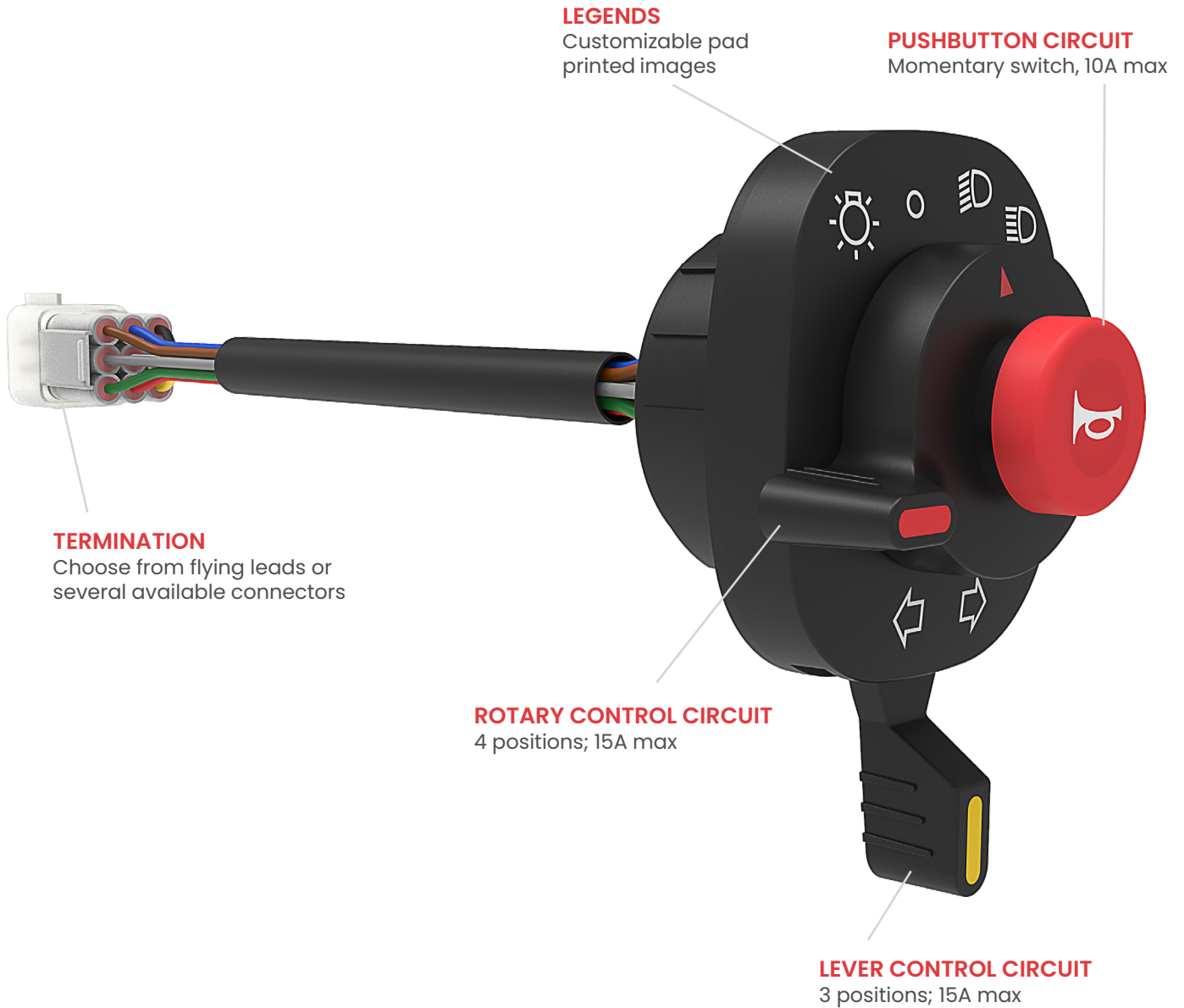
**IP67 Sealing**

Above-Panel

## Typical Applications

- Commercial Vehicles
- Recreational Vehicles
- Lawn & Garden Equipment
- Any Application Requiring Sealing Protection

# Design Features



# Tech Specs

## Electrical

Contact Rating	Pushbutton: 10A 12V Lever: 15A 12V Rotary: 15A 12V
Withstand High Voltage	ISO 16750-2 4.11, 500Vrms (50Hz to 60 Hz) with a duration of 60s
Insulation Resistance	Minimum 5000MΩ for 1 min @ 500VDC between terminals & housing
Life	30,000 cycles (6,000 cycles at -40°C, 18,000 cycles at ambient, 6,000 cycles at 85°C).
Contact	AgSnO2
Terminals	Copper Alloy, in connector
Voltage Requirement	12 VDC
Operating Voltage	9 – 16 VDC

## Physical

Function	Pushbutton switch, rotary control switch, lever control switch														
Seals	Silicone														
Mounting	Front panel mount, see dimensional specifications page														
Base	PC+ABS														
Actuator	PC+ABS														
Bracket	Glass-filled Nylon PA6														
Connector	Can be customized														
<table border="1"> <thead> <tr> <th>Connector Part Number</th> <th>Mating Connector Part Number</th> </tr> </thead> <tbody> <tr> <td>DJ7101-6.3-21</td> <td>DJ7101-6.3-11</td> </tr> <tr> <td>DJ7101-2.3-11</td> <td>DJ7101-2.3-21</td> </tr> <tr> <td>DJ0116-6.3-11</td> <td>DJ0116-6.3-21</td> </tr> <tr> <td>DJ7091Y-2.3-11</td> <td>DJ7091Y-2.3-21</td> </tr> <tr> <td>TE:174657-2</td> <td>TE:174655-2</td> </tr> <tr> <td>DJ7091Y-2.3-21</td> <td>DJ7091Y-2.3-11</td> </tr> </tbody> </table>		Connector Part Number	Mating Connector Part Number	DJ7101-6.3-21	DJ7101-6.3-11	DJ7101-2.3-11	DJ7101-2.3-21	DJ0116-6.3-11	DJ0116-6.3-21	DJ7091Y-2.3-11	DJ7091Y-2.3-21	TE:174657-2	TE:174655-2	DJ7091Y-2.3-21	DJ7091Y-2.3-11
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Actuation force	Pushbutton: Momentary (ON)-OFF Single Pole: 17.3+/-3.5 N Maintained ON-OFF: 14.5+/-1.5 N Rotary Control: 0.42+/-0.20 N.m Lever Control: 0.13+/-0.06 N.m														
Weight	Approx. 0.2 lbs [91g]														
Depth behind panel	1.10" [28.5 mm] (to bottom of header)														

## Environmental

Operating Temp.	-40 °C to +85 °C.
Vibration	Random test IEC 60068-2-64: Random excitation at 10,150, 220 and 350 Hz breakpoint frequencies, 5 hours in each axis, gn=5g.General IEC 60068-2-6: Swept sine wave from 5-500Hz, +/-15mm amplitude, gn=5g, 20 cycles in each plane, 15 min/cycle.Resonance IEC 60068-2-6: Sinusoidal from 10-2000Hz, 5 minutes at resonant point, gn=5g
Shock	IEC 60068-2-27, 3 shocks in each axis (18 total) with 50g acceleration for 11ms pulse duration.
Handling/Drop	Free drop from 1000mm height, no breakage after 3 drops
Thermal Cycle	IEC 60068-2-14 Test Nb, -40°C to +85°C 2 cycles of 8 hours each
Salt Spray	IEC 60068-2-52 Test Kb, severity level 4 (14 days)
Thermal Shock	IEC 60068-2-14 Test Na, -40°C to +85°C 1 hour per cycle (30 minutes at each temperature) for 10 cycles
Humidity Cycle	IEC 60068-2-30 Test Db, 6 cycles
Hot soak	IEC 60068-2-2, 85°C for 96 hours
Cold soak	IEC 60068-2-1, Test Bb, -40°C for 96 hours
Humidity soak	IEC 60068-2-78, Test Cab, 30°C & RH 93% for 240 hours
Corrosion/Chemical Splash	ISO 16750-5, for engine oil, hydraulic oil, diesel fuel, grease and urea at 85°C & RH 60%
Sealing	IP67, for above-panel components of the actual switch
UV protection	ISO 4982-2, 1000hr Xenon Arc, 0.51W/m2*nm at 340nm, per cycle 102mins light / 18mins light and spray, BP temp. 65°C, air temp. 38°C, RH50%

# Ordering Scheme

Sample Part Number **CSW - 1 A 1 A 1 A 1 - 000**

Selection 1 2 3 4 5 6 7 8 9

## 1. SERIES

**CSW** CSW-Series Combination Switch

## 2. PUSHBUTTON CIRCUIT

- 1 Momentary (ON)-OFF Single Pole
- 2<sup>1</sup> Maintained ON-OFF

## 3. ROTARY CONTROL CIRCUIT

- A 4 Positions
- B 3 Positions (Position 2 OFF)
- C 2 Positions
- D<sup>2</sup> 3 Positions (Position 1 OFF)

## 4. LEVER CONTROL CIRCUIT

- 1 ON-OFF-ON Single Pole
- 2 None

## 5. RATINGS

- A Pushbutton: 10A @ 12VDC
- Rotary: 15A @ 12VDC
- Lever: 15A @ 12VDC

## 6. CONNECTORS

	Connector Manufacturer*	Manufacturer Part Number	Number of Terminals	Sealed
0	None	N/A	N/A	N/A
1	Boer Electrical	DJ7101-6.3-21	10	No
2 <sup>3</sup>	Yueqing Jinhai	DJ7101-2.3-11	10	No
		DJ70116-6.3-11	1	No
3	Cnly	DJ7091Y-2.3-11	9	Yes
4	TE Connectivity	TE: 174657-2	10	Yes
5	Boer Electrical	DJ7091Y-2.3-21	9	Yes

\* Note: Or equivalent

## 7. ROTARY ORIENTATION

- A Left
- B Right

## 8. WIRE

- 1 Varies: 6.30 inches [160 mm]
- 2 Varies: 8.26 inches [210 mm]
- 3<sup>4</sup> 9 Wires: 11.40 inches [290 mm]
- 1 Wire: 12.60 inches [320 mm]

## 9. LEGENDS see next page for legend artwork

- 000 No Legend
- 001 Legend 1
- 002 Legend 2
- 003 Legend 3
- 004 Legend 4
- 005 Legend 5
- 006 Legend 6
- 007 Legend 7
- 008 Legend 8
- 009 Legend 9
- 010 Legend 10
- 011 Legend 11
- 012 Legend 12
- XXX Custom Legends

Consult factory for additional legends.

### Notes:

- 1 Must use selection B from box 7
- 2 Must use selection 1 from box 4
- 3 Must use selection 3 from box 8
- 4 Must use selection 2 from box 6

 [Configure Complete Part Number >](#)

# Ordering Scheme Legend Artwork

## 9. LEGENDS

001



002



003



004



005



006



007



008



009



010



011



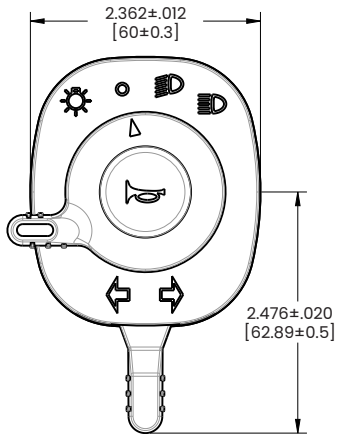
012



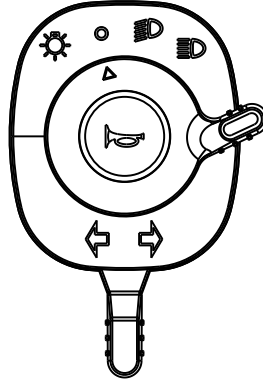
# Dimensional Specs

inches [millimeters]

ROTARY KNOB OPTION 1:  
LEFT ROTARY KNOB



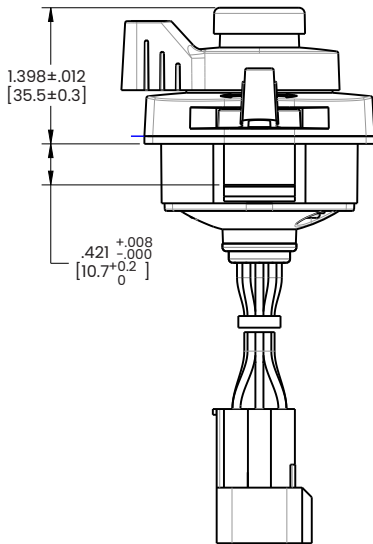
ROTARY KNOB OPTION 2:  
RIGHT ROTARY KNOB



LEGEND SHOWN HERE IS ONLY AN EXAMPLE  
LEGEND MAY VARY BASED ON REQUEST

## THE WIRE COLOR

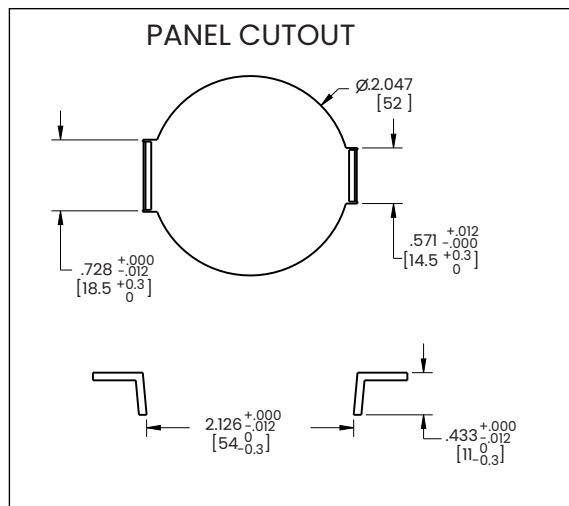
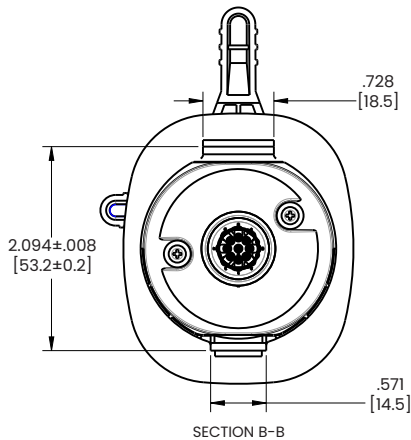
WIRE NO.	WIRE COLOR	WIRE NO.	WIRE COLOR
1	PURPLE	6	RED
2	GREEN	7	GRAY
3	BLACK	8	BROWN
4	YELLOW	9	BLUE
5	WHITE		



## SWITCH WIRING DIAGRAM

SWITCH POSITION	TERMINAL
	9 — 1
	9 — 1, 3
	9 — 5, 1

SWITCH POSITION	TERMINAL
	2 — 7
	2 — 6
	8 — 4



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