

CSW-Series

COMBINATION SWITCH

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. Together, these features make the CSW-Series cost-effective, easy to install, and well suited for a variety of commercial and recreational vehicles; and lawn and garden equipment.



Product Highlights:

- Sealed to IP67 for Above-Panel Components
- Multiple Functions
- Compact Design
- Easy Installation

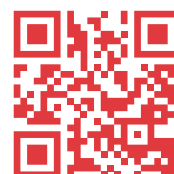


Resources:

[Configure a Complete Part](#)

[Download CAD & Sales Drawing >](#)

[Watch Product Video](#)



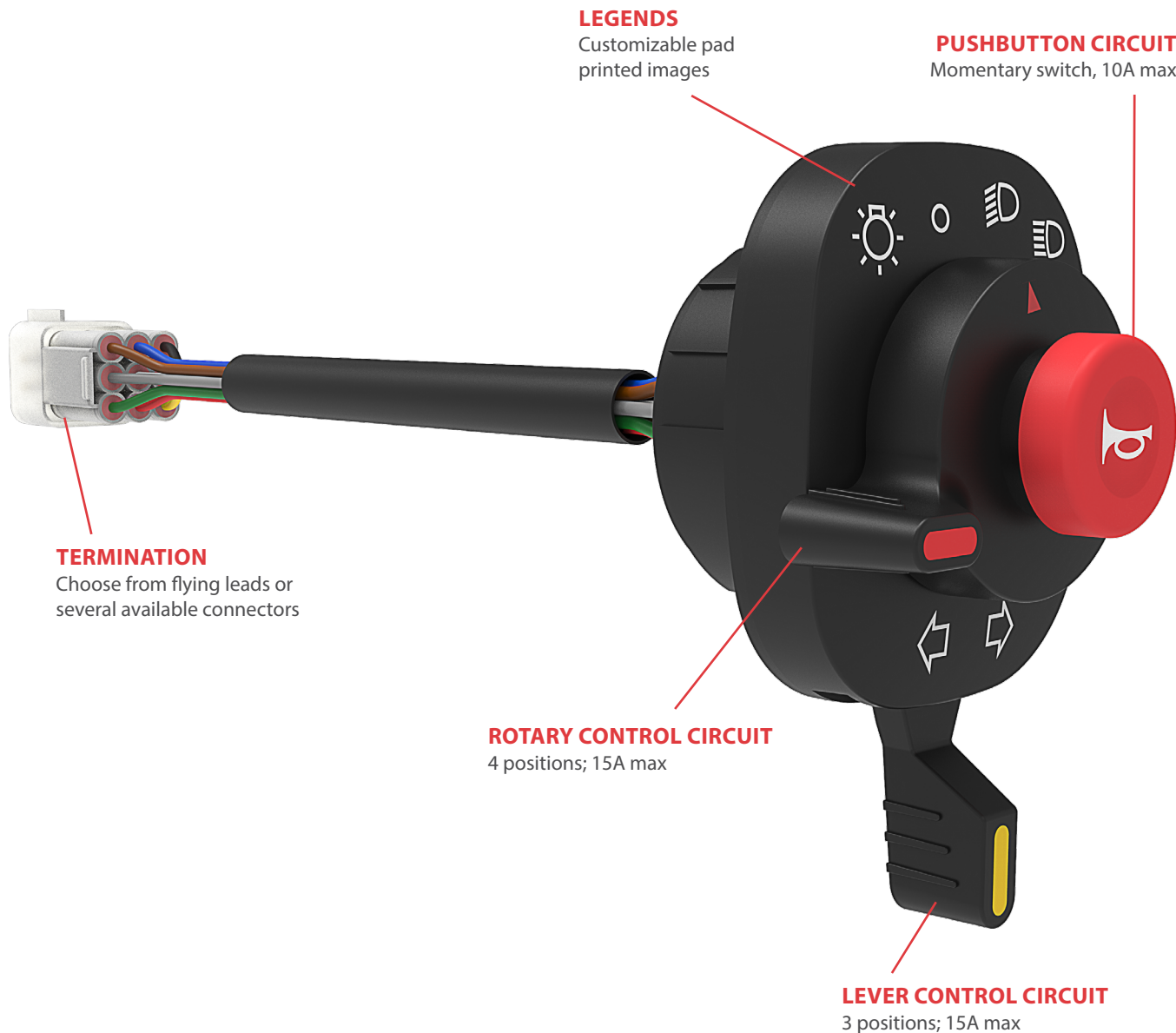
Typical Applications:

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



CSW-Series

DESIGN FEATURES



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	Up to 18000 cycles, temperature dependent
Contact	AgSnO ₂
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

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

Actuation force	Pushbutton: 16 ± 2 N Lever: 0.28 ± 0.05 N.m Rotary: 0.33 ± 0.05 N.m
Weight	Approx. 0.2 lbs [91g]
Depth behind panel	1.10" [28.5 mm] (to bottom of header)

Environmental

Operating Temperature	-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/m ² *nm at 340nm, per cycle 102mins light / 18mins light and spray, BP temp. 65°C, air temp. 38°C, RH50%

*Manufacturer reserves the right to change product specification without prior notice.
GPS-0015 Rev: C

**1 SERIES**

CSW CSW-Series Combination Switch

2 PUSHBUTTON CIRCUIT

1 Momentary On Single Pole

3 ROTARY CONTROL CIRCUIT

A 4 Positions

4 LEVER CONTROL CIRCUIT

1 On-Off-On Single Pole

5 RATINGS

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

6 CONNECTORS

	Connector Manufacturer*	Manufacturer Part Number	Number of Terminals	Sealed
0 ³	None	N/A	N/A	N/A
1	Boer Electrical	DJ7101-6.3-21	10	No
2 ¹	Yueqing Jinhai	DJ7101-2.3-11	10	No
		DJ70116-6.3-11	1	No
3	Only	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

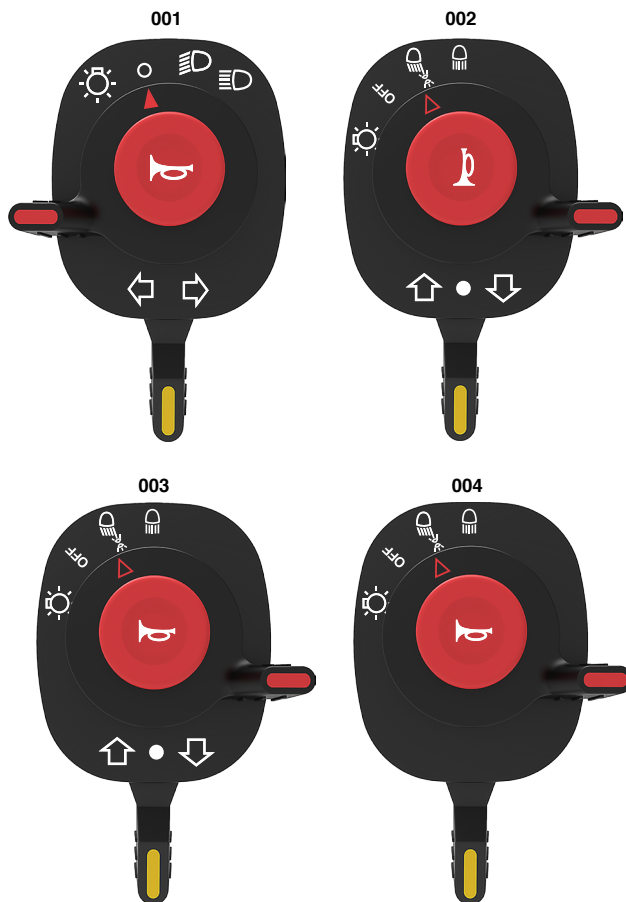
1 9 Wires: 6.30 inches [160 mm]
 2 9 Wires: 8.26 inches [210 mm]
 3² 9 Wires: 11.40 inches [290 mm]
 1 Wire: 12.60 inches [320 mm]

Notes:

- 1 Must use selection 3 from box 8.
 2 Selection 2 from box 6 only.
 3 Must use selection 1 from box 8.

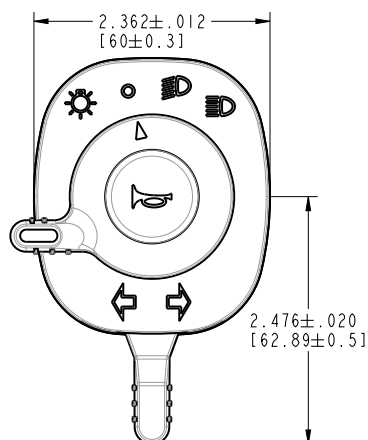
9 LEGEND

000 No Legend
 001 Legend 1
 002 Legend 2
 003 Legend 3
 004 Legend 4
 XXX Custom Legends
 Consult factory for additional legends.

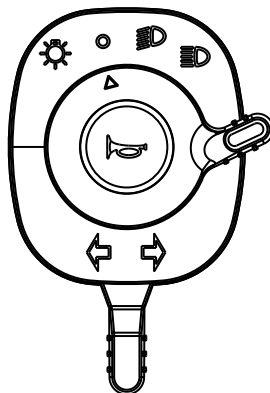


Dimensional Specifications: in. [mm]

ROTARY KNOB OPTION 1:
LEFT ROTARY KNOB



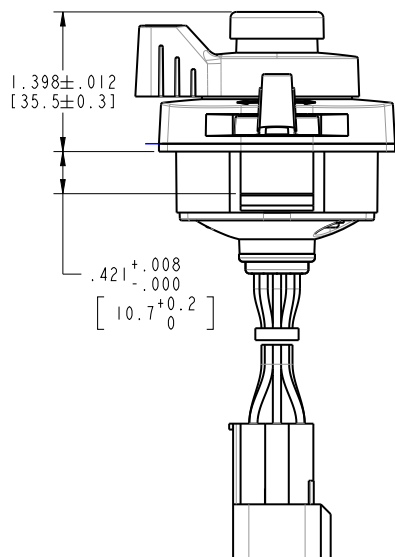
ROTARY KNOB OPTION 2:
RIGHT ROTARY KNOB



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

THE WIRE COLOR

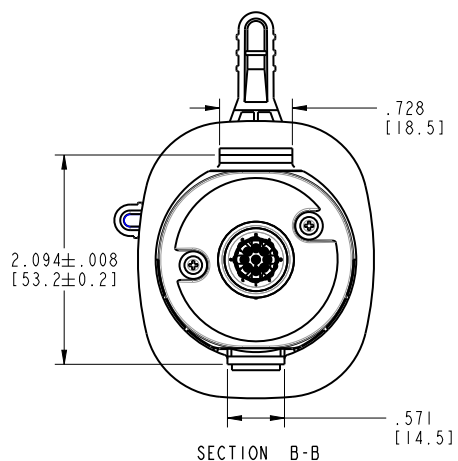
WIRE NO.	WIRE COLOR	WIRE NO.	WIRE COLOR
1	PURPLE	6	RED
2	GREEN	7	GRAY
3	BLACK	8	BROWN
4	YELLOW	9	BLUE
5	WHITE		



SWITCH WIRING DIAGRAM

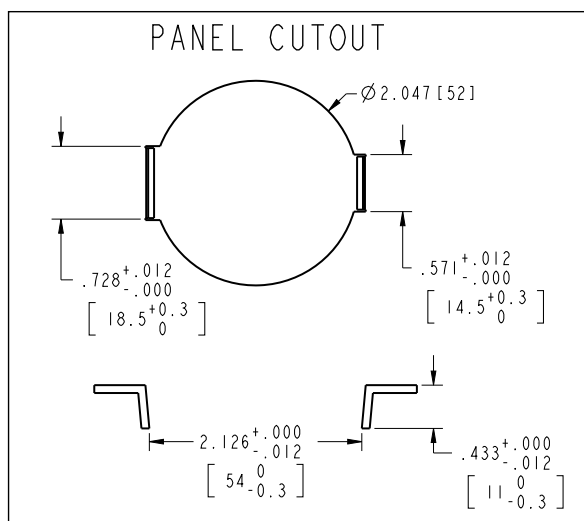
SWITCH POSITION	TERMINAL
	9 — 1
	9 — 1 9 — 3
	9 — 5 9 — 1

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



SECTION B-B

PANEL CUTOUT



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Click on a region of the map below to find your local representatives and distributors or visit www.carlingtech.com/findarep.



About Carling

Founded in 1920, Carling Technologies is a leading manufacturer of electrical and electronic switches and assemblies, circuit breakers, electronic controls, power distribution units, and multiplexed power distribution systems. With four ISO9001 and IATF16949 registered manufacturing facilities and technical sales offices worldwide, Carling Technologies Sales, Service and Engineering teams do much more than manufacture electrical components, they engineer powerful solutions! To learn more about Carling please visit www.carlingtech.com/company-profile.

To view all of Carling's environmental, quality, health & safety certifications please visit www.carlingtech.com/environmental-certifications

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