Rotary Selector Switches For Thermocouple, RTD and

Thermistor Circuits





OSW Series

- √ 76 mm (3"), 127 mm (5")
 and ¼ DIN Sizes
- ✓ Gold or Silver Plated Contacts
- ✓ 2 or 3 Poles in 76 mm (3") and 127 mm (5") sizes
- ∠ 2, 3, or 4 Poles in 1/4 DÍN Size
- ✓ 2 to 34 Positions
- Round or Pistol Grip **Handles**
- ✓ Wire Connecting Combination Screws Included

For isothermal, low resistance switching of temperature measurement circuits, NEWPORT offers three styles of selector switches. The OSW style features silver plated contacts, while the OSWG line includes gold plated

contacts. The SW14 1/4 DIN switches come with a choice of gold or silver-plated contacts. Each style offers 2 to 34 positions in a break-resistant Norvl® case.

The isothermal design of these rotary switches minimizes temperature gradients between the input and output thermocouple wiring. This in turn minimizes errors in transmitting thermocouple signals due to the generation of a thermal emf at the wire junctions. The low resistance of the silver or gold plated contacts also enables switching of temperature sensitive resistance devices, such as RTD's and thermistors.

Two pole SW and OSW series switches have a convenient "off" position. The "off" position may be left as an open circuit or shorted to keep spurious signals from registering on thermocouple instruments. Each pole is fully isolated. For quick and easy wiring, the terminals located at the rear of the switch are clearly marked.

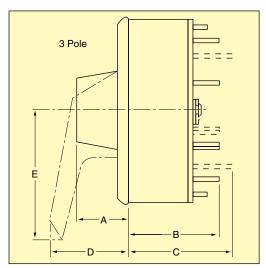


MONOGRAM® SERIES with gold plated contacts



Any switch is available with a standard round knob or an optional pistol grip handle. Viewing the switch from a distance is generally easier with a pistol grip handle, as is switching its position while wearing gloves.





Gold or Silver Plated Contacts

Standard Screw Termination

Insulation Resistance: $20~\text{M}\Omega$ at 300~Vdc Contact Resistance: $0.004~\Omega$ or less Also Available: Pistol grip handle retrofit kit; specify OSW-PG and switch size for additional cost

OSW Switch Dimensions

Switch Size mm	Dim. A mm	Dim. B* mm	Dim. C mm	Dim. D mm	Dim. E mm	Bezel Size mm
(inch) 76	(inch) 28.6	(inch) 54	(inch) 62	(inch) 44.4	(inch) 66.7	(inch) 82.55
(3)	(1½)	(21/8)	(27/16)	(13/4)	(25/8)	(31/4)
127	38.1	54	62	58.7	92.07	133.35
(5)	(1½)	(21/8)	(27/16)	(25/16)	(35/8)	(51/4)

To order with optional pistol grip, add suffix "-PG" to model number. Comes complete with mounting hardware, panel mounting template and instruction manual for additional cost.

Ordering Example: OSWG3-20-PG, 76 mm (3") switch, 20 positions, gold contacts, with optional pistol grip.

No. of Poles No. of Positions Contact Action Size Silver Plated Contacts Model No. Model No. Model No. Model No. Model No. OSW3-2 OSW3-2 OSW3-2 OSW3-2 OSW3-2 OSW3-3 OSW3-3 OSW3-3 OSW3-4 OSW3-4 OSW3-4 OSW3-5 OSW3-5 OSW3-5 OSW3-6 OSW3-6 OSW3-6 OSW3-6 OSW3-8 OSW3-8 OSW3-9 OSW3-9 OSW3-10 OSW3-10 OSW3-10 OSW3-12 OSW3-12 OSW3-12 OSW3-12 OSW3-14 OSW3-16 OSW3-18 OSW3-20 OSW3-20 OSW3-20 OSW3-20 OSW3-20 OSW5-24 OSW5-24 OSW5-24 OSW5-24 OSW5-24 OSW5-28 OSW5-32 OSW5-32 OSW5-32 OSW5-32 OSW5-32 OSW5-36 OSW5-36 OSW5-40 OSW	To Order Visit newportUS.com/OSW_G for Pricing and Details						
Cost					Contacts	Contacts	
Second	Poles	Positions	Action	Size			
Second		2			OSW3-2	OSWG3-2	
S		3			OSW3-3	OSWG3-3	
Before Make		4			OSW3-4	OSWG3-4	
Colored Residue		5			OSW3-5	OSWG3-5	
P 10		6			OSW3-6	OSWG3-6	
P 10	2	8			OSW3-8	OSWG3-8	
Text		9			OSW3-9	OSWG3-9	
Text	D	10			OSW3-10	OSWG3-10	
Table Tabl		12			OSW3-12	OSWG3-12	
Table Tabl		14			OSW3-14	OSWG3-14	
Color	0	16			OSW3-16	OSWG3-16	
Color		18			OSW3-18	OSWG3-18	
12 18 127 mm (5") 0SW5-28 0SWG5-28 0SWG5-30 0SW5-30 0SWG5-32 0SWG5-32 0SWG5-32 0SWG5-36 0SWG5-36 0SWG5-36 0SWG5-36 0SWG5-40 0SWG5-40 0SWG5-40 0SWG5-40 0SWG5-40 0SWG7-6 0SWG7-6 0SWG7-10 0SWG7-10 0SWG7-12 0SWG7-12 0SWG7-12 0SWG7-12 0SWG7-12 0SWG7-24 0SWG7-24 0SWG7-24 0SWG7-28 0SWG7-28 0SWG7-28 0SWG7-30 0SWG7-30 0SWG7-32		20	Break		OSW3-20	OSWG3-20	
12 18 127 mm (5") 0SW5-28 0SWG5-28 0SWG5-30 0SW5-30 0SWG5-32 0SWG5-32 0SWG5-32 0SWG5-36 0SWG5-36 0SWG5-36 0SWG5-36 0SWG5-40 0SWG5-40 0SWG5-40 0SWG5-40 0SWG5-40 0SWG7-6 0SWG7-6 0SWG7-10 0SWG7-10 0SWG7-12 0SWG7-12 0SWG7-12 0SWG7-12 0SWG7-12 0SWG7-24 0SWG7-24 0SWG7-24 0SWG7-28 0SWG7-28 0SWG7-28 0SWG7-30 0SWG7-30 0SWG7-32	F	24	Before	127 mm		OSWG5-24	
SW5-30 OSWG5-30 OSWG5-30 OSWG5-30 OSWG5-32 OSWG5-32 OSWG5-36 OSWG5-36 OSWG5-36 OSWG5-36 OSWG5-40 OSWG5-40 OSWG5-40 OSWG5-40 OSWG5-40 OSWG7-6 OSWG7-6 OSWG7-10 OSWG7-10 OSWG7-12 OSWG7-12 OSWG7-18 OSWG7-18 OSWG7-18 OSWG7-20 OSWG7-20 OSWG7-24 OSWG7-24 OSWG7-24 OSWG7-24 OSWG7-28 OSWG7-28 OSWG7-30 OSWG7-30 OSWG7-32 OS		28	Make		OSW5-28	OSWG5-28	
Note Section Section		30		(3)	OSW5-30	OSWG5-30	
Make OSW5-40 OSWG5-40		32			OSW5-32	OSWG5-32	
6 OSWT-6 OSWGT-6 OSWGT-10 OSWGT-10 OSWGT-12 OSWGT-12 OSWGT-12 OSWGT-12 OSWGT-18 OSWT-18 OSWGT-18 OSWT-20 OSWGT-20 OSWGT-24 OSWGT-24 OSWGT-24 OSWGT-28 OSWGT-28 OSWGT-30 OSWT-30 OSWGT-32		36			OSW5-36	OSWG5-36	
3 10 12 P 18 20 Swr-10 OSWT-10 OSWGT-10 OSWGT-12 OSWT-12 OSWT-12 OSWT-18 OSWT-18 OSWT-18 OSWT-20 OSWT-20 OSWT-24 OSWT-24 OSWT-24 OSWT-28 OSWT-28 OSWT-28 OSWT-30 OSWT-30 OSWT-32	"OFF"	40			OSW5-40	OSWG5-40	
P		6	Before		OSWT-6	OSWGT-6	
P	3	10			OSWT-10	OSWGT-10	
24 Before Make 28 30 SWT-24 OSWGT-24 OSWGT-28 OSWGT-30 OSWT-30 OSWGT-30 OSWGT-32		12			OSWT-12	OSWGT-12	
24 Before Make 28 30 SWT-24 OSWGT-24 OSWGT-28 OSWGT-30 OSWT-30 OSWGT-30 OSWGT-32	D	18			OSWT-18	OSWGT-18	
24 Before Make 28 30 SWT-24 OSWGT-24 OSWGT-28 OSWGT-28 OSWGT-30 OSWT-30 OSWGT-32		20			OSWT-20	OSWGT-20	
32 OSWT-32 OSWGT-32	\mathbf{O}	24			OSWT-24	OSWGT-24	
32 OSWT-32 OSWGT-32	ĭ	28			OSWT-28	OSWGT-28	
32 OSWT-32 OSWGT-32	L	30			OSWT-30	OSWGT-30	
00		32			OSWT-32	OSWGT-32	
	_	36			OSWT-36	OSWGT-36	
NO "OFF" 40 OSWT-40 OSWGT-40	NO "OFF"	40			OSWT-40	OSWGT-40	

¼ DIN Rotary Selector Switches with "Jab-In" Connections

✓ Fits Standard ¼ DIN Cutout

Gold or Silver Plated Contacts

∠ 2, 3, or 4 Poles

✓ 2 to 34 Positions

Round or Pistol Grip Handles

✓ For Thermocouple, RTD or Thermistor Circuits



NEWPORT can supply pre-configured 483 mm (19") panels with connectors, switch and meter installed for most any application. Consult sales for details.



SW142-10-M

NEWPORT is pleased to offer a rotary selector switches in a ½ DIN size. Like our other rotary selector switches, this model is available with Break Before Make and Make Before Break contact action. Models are available with 2 to 34 positions in 2, 3 or 4 pole versions. Available with a standard round knob or optional pistol-grip handle. The ½ DIN switch also has "jab-in" style connections.

Jab-in Connections on ¼ DIN Switch only Easy to use jab-in connections; no loose hardware.

Dimensions

Bezel: 96 mm (3.78") sq, ½ DIN

Panel Depth:

2-pole: 63 mm (2¹%₂") 3-pole: 82 mm (3⁵%₂") 4-pole: 101 mm (3²%₂") Panel Cutout: 92 mm (3⁶%") Dia. Face Height: 28 mm (1⁶%₂"); 67 mm (2⁶%") with pistol grip

To Order Visit newportUS.com/OSW_G for Pricing and Details 1/4 DIN Units					
No. of	No. of	Silver-Plated Contacts	Gold-Plated Contacts		
Poles	Positions	Model No.	Model No.		
	2	SW142-2-(*)	SW142G-2-(*)		
	4	SW142-4-(`*)	SW142G-4-(*)		
	6	SW142-6-(*)	SW142G-6-(*)		
	8	SW142-8-(*)	SW142G-8-(*)		
_	10	SW142-10-(*)	SW142G-10-(*)		
2	12	SW142-12-(*)	SW142G-12-(*)		
	16	SW142-16-(*)	SW142G-16-(*)		
includes	18	SW142-18-(*)	SW142G-18-(*)		
"off"	20	SW142-20-(*)	SW142G-20-(*)		
position	24	SW142-24-(*)	SW142G-24-(*)		
	30	SW142-30-(*)	SW142G-30-(*)		
	34	SW142-34-(*)	SW142G-34-(*)		
	2	SW143-2-(*)	SW143G-2-(*)		
	4	SW143-4-(*)	SW143G-4-(*)		
	6	SW143-6-(*)	SW143G-6-(*)		
	8	SW143-8-(*)	SW143G-8-(*)		
	10	SW143-10-(*)	SW143G-10-(*)		
3	12	SW143-12-(*)	SW143G-12-(*)		
	16	SW143-16-(*)	SW143G-16-(*)		
NO "off"	18	SW143-18-(*) SW143-20-(*)	SW143G-18-(*) SW143G-20-(*)		
	20 24	SW143-20-(*) SW143-24-(*)	SW143G-20-(*)		
position	30	SW143-24-() SW143-30-(*)	SW143G-24-() SW143G-30-(*)		
	34	SW143-34-(*)	SW143G-30-()		
		` ,	()		
	2	SW144-2-(*)	SW144G-2-(*)		
	4 6	SW144-4-(*) SW144-6-(*)	SW144G-4-(*)		
	8	SW144-8-(*)	SW144G-6-(*) SW144G-8-(*)		
	10	SW144-0-(*)	SW144G-10-(*)		
4	12	SW144-10-(*)	SW144G-10-()		
	16	SW144-16-(*)	SW144G-16-(*)		
NO	18	SW144-18-(*)	SW144G-18-(*)		
"off"	20	SW144-20-(*)	SW144G-20-(*)		
position	24	SW144-24-(*)	SW144G-24-(*)		
	30	SW144-30-(*)	SW144G-30-(*′)		
	34	SW144-34-(*)	SW144G-34-(̀*)		

Comes complete with mounting hardware, panel cutout template and instruction manual.

*Specify contact action: "B" = Break Before Make, "M" = Make Before Break.
To order with optional pistol grip handle add suffix "-PG" to model number for additional cost.

To order a retro-fit kit for pistol grip handle specify: **SW14-PG**, for silver plated contacts, **SW14G-PG**, for gold plated contacts.

Ordering Examples: SW142-10-M-PG, 2-pole, 10-position switch with Make Before Break action, silver-plated contacts and optional pistol grip handle.

SW143G-14-B, 3-pole, 14 position switch with Break Before Make action, gold-plated contacts.