## Rotary Selector Switches For Thermocouple, RTD and Thermistor Circuits



## OSW Series

$\checkmark 76$ mm (3"), 127 mm (5") and $1 / 4$ DIN Sizes
$\checkmark$ Gold or Silver Plated Contacts

- 2 or 3 Poles in 76 mm (3") and 127 mm (5") sizes
$\checkmark 2,3$, or 4 Poles in 1/4 DIN Size
$\checkmark 2$ to 34 Positions
$\checkmark$ Round or Pistol Grip Handles
$\checkmark$ 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 Noryl ${ }^{\circledR}$ 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 ${ }^{\ominus}$ 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.

## Standard Size Rotary Selector Switches for Thermocouples and RTD's




Gold or Silver Plated Contacts
$\checkmark$ Standard Screw Termination
Insulation Resistance: $20 \mathrm{M} \Omega$ 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 <br> Size <br> mm <br> (inch) <br> 7 | $\begin{gathered} \text { Dim. } \\ \text { A } \\ \text { mm } \\ \text { (inch) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Dim. } \\ \mathbf{B}^{*} \\ \mathrm{~mm} \\ \text { (inch) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Dim. } \\ \text { C } \\ \text { mm } \\ \text { (inch) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Dim. } \\ \text { D } \\ \text { mm } \\ \text { (inch) } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Dim. } \\ \text { E } \\ \text { mm } \\ \text { (inch) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Bezel } \\ \text { Size } \\ \mathrm{mm} \\ \text { (inch) } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 76 | 28.6 | 54 | 62 | 44.4 | 66.7 | 82.55 |
| (3) | (11/8) | (21/8) | ( $2^{7 / 16}$ ) | (13/4) | (25/8) | (31/4) |
| 127 | 38.1 | 54 | 62 | 58.7 | 92.07 | 133.35 |
| (5) | (11/2) | (21/8) | ( $2^{7 / 16}$ ) | (25/16) | (35/8) | ( $5^{1 / 4}$ ) |

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, $76 \mathrm{~mm}\left(3^{\prime \prime}\right)$ switch, 20 positions, gold contacts, with optional pistol grip.

| To Order Visit newportUS.com/OSW_G for Pricing and Details |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. of Poles | No. of Positions | Contact Action | Size | Silver Plated Contacts Model No. | Gold Plated Contacts Model No. |
| $2$ | 2 | Break Before Make | $\underset{\left(3^{\prime \prime}\right)}{76 \mathrm{~mm}}$ | OSW3-2 | OSWG3-2 |
|  | 3 |  |  | OSW3-3 | OSWG3-3 |
|  | 4 |  |  | OSW3-4 | OSWG3-4 |
|  | 5 |  |  | OSW3-5 | OSWG3-5 |
|  | 6 |  |  | OSW3-6 | OSWG3-6 |
|  | 8 |  |  | OSW3-8 | OSWG3-8 |
|  | 9 |  |  | OSW3-9 | OSWG3-9 |
|  | 10 |  |  | OSW3-10 | OSWG3-10 |
| InCludes "OFF" | 12 | Break Before Make | $\begin{gathered} 76 \mathrm{~mm} \\ \left(3^{\prime \prime}\right) \\ 127 \mathrm{~mm} \\ \left(5^{\prime \prime}\right) \end{gathered}$ | OSW3-12 | OSWG3-12 |
|  | 14 |  |  | OSW3-14 | OSWG3-14 |
|  | 16 |  |  | OSW3-16 | OSWG3-16 |
|  | 18 |  |  | OSW3-18 | OSWG3-18 |
|  | 20 |  |  | OSW3-20 | OSWG3-20 |
|  | 24 |  |  | OSW5-24 | OSWG5-24 |
|  | 28 |  |  | OSW5-28 | OSWG5-28 |
|  | 30 |  |  | OSW5-30 | OSWG5-30 |
|  | 32 |  |  | OSW5-32 | OSWG5-32 |
|  | 36 |  |  | OSW5-36 | OSWG5-36 |
|  | 40 |  |  | OSW5-40 | OSWG5-40 |
|  | 6 | Break Before Make | $\underset{\left(5^{\prime \prime}\right)}{127 \mathrm{~mm}}$ | OSWT-6 | OSWGT-6 |
|  | 10 |  |  | OSWT-10 | OSWGT-10 |
|  | 12 |  |  | OSWT-12 | OSWGT-12 |
|  | 18 |  |  | OSWT-18 | OSWGT-18 |
|  | 20 |  |  | OSWT-20 | OSWGT-20 |
|  | 24 |  |  | OSWT-24 | OSWGT-24 |
|  | 28 |  |  | OSWT-28 | OSWGT-28 |
|  | 30 |  |  | OSWT-30 | OSWGT-30 |
|  | 32 |  |  | OSWT-32 | OSWGT-32 |
|  | 36 |  |  | OSWT-36 | OSWGT-36 |
|  | 40 |  |  | OSWT-40 | OSWGT-40 |

## 1/4 DIN Rotary Selector Switches with "Jab-In" Connections

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~ Fits Standard 1⁄4 DIN Cutout
\checkmark ~ G o l d ~ o r ~ S i l v e r ~ P l a t e d ~ C o n t a c t s
\vee 2, 3, or 4 Poles
\vee 2 to 34 Positions
\checkmark ~ R o u n d ~ o r ~ P i s t o l ~ G r i p ~ H a n d l e s
\checkmark ~ F o r ~ T h e r m o c o u p l e , ~ R T D ~ o r ~
    Thermistor Circuits
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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 $1 / 4 \mathrm{DIN}$ 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 $1 / 4$ DIN switch also has "jab-in" style connections.


## Dimensions

Bezel: 96 mm (3.78") sq, $1 / 4$ DIN
Panel Depth:
2-pole: $63 \mathrm{~mm}\left(2^{13 / 32 "}\right)$
3 -pole: $82 \mathrm{~mm}\left(3^{5} / 32^{2}\right)$
4-pole: $101 \mathrm{~mm}\left(3^{29} / 32\right.$ " $)$
Panel Cutout: $92 \mathrm{~mm}\left(35 / 8^{\prime \prime}\right)$ Dia.
Face Height: $28 \mathrm{~mm}\left(13 / 32^{2}\right)$;
$67 \mathrm{~mm}\left(25 / 8^{\prime \prime}\right)$ with pistol grip

| No. of Poles | No. of Positions | Silver-Plated Contacts Model No. | Gold-Plated Contacts Model No. |
| :---: | :---: | :---: | :---: |
| 2 | 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-(*) |
|  | 12 | SW142-12-(*) | SW142G-12-(*) |
|  | 16 | SW142-16-(*) | SW142G-16-(*) |
| includes "off" position | 18 | SW142-18-(*) | SW142G-18-(*) |
|  | 20 | SW142-20-(*) | SW142G-20-(*) |
|  | 24 | SW142-24-(*) | SW142G-24-(*) |
|  | 30 | SW142-30-(*) | SW142G-30-(*) |
|  | 34 | SW142-34-(*) | SW142G-34-(*) |
| 3 | 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-(*) |
|  | 12 | SW143-12-(*) | SW143G-12-(*) |
|  | 16 | SW143-16-(*) | SW143G-16-(*) |
|  | 18 | SW143-18-(*) | SW143G-18-(*) |
|  | 20 | SW143-20-(*) | SW143G-20-(*) |
|  | 24 | SW143-24-(*) | SW143G-24-(*) |
|  | 30 | SW143-30-(*) | SW143G-30-(*) |
|  | 34 | SW143-34-(*) | SW143G-34-(*) |
| 4 | 2 | SW144-2-(*) | SW144G-2-(*) |
|  | 4 | SW144-4-(*) | SW144G-4-(*) |
|  | 6 | SW144-6-(*) | SW144G-6-(*) |
|  | 8 | SW144-8-(*) | SW144G-8-(*) |
|  | 10 | SW144-10-(*) | SW144G-10-(*) |
|  | 12 | SW144-12-(*) | SW144G-12-(*) |
|  | 16 | SW144-16-(*) | SW144G-16-(*) |
|  | 18 | SW144-18-(*) | SW144G-18-(*) |
|  | 20 | SW144-20-(*) | SW144G-20-(*) |
|  | 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.

