



Switches

Gardner Bender™ switches are available in many different styles and sizes. They are used in countless applications, from basic on-off to multifunction applications.



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Switch Terminology

Single Pole (SP): A switch device that opens, closes or changes connections in a single conductor of an electrical circuit

Double Pole (DP): A switch device that opens, closes or changes connections in both conductors of the same circuit.

Two Circuit (2 CIR): A switch device that opens, closes or changes connections in a single conductor of two independent circuits.

Single Throw (ST): A switch device that opens, closes or completes a circuit at only one of the extreme positions of its actuator.

Double Throw (DT): A switch device that opens, closes or completes a circuit at both extreme positions of its actuator.

Actuator: A lever, push-button, slide, trigger or other means by which an external force is applied to operate a switch mechanism.

Normally Open (N0): A momentary type switch in which one or more circuits are open when the switch actuator is at its normal or rest position.

Normally Closed (NC): A momentary type switch in which one or more circuits are closed when the switch actuator is at its normal or rest position.

Alternate Action (Double Action Push): Push to make, then push to break, a circuit.

Power Ratings for Switches: The current handling capability of a switch measured in amperes, horsepower, lamp load or combinations of these with applicable voltages.



UL/CSA Rated Switches

A UL/CSA-marked rating in amperes indicates that the switch meets or exceeds test house performance requirements of 6000 make-and-break cycles at the rated current, preceded by 50 make-and-break cycles at 150% switch current rating. 125% is used when switch ratings exceed 10 amperes.

A UL/CSA horsepower-only rated device

meets minimum test requirements of 50 make-and-break cycles at the appropriate locked rotor current, followed by 6000 cycles at one-sixth the AC-locked rotor current and 10% of the DC-locked rotor current.

AC ampere ratings are resistive or inductive, with the inductive rating tested at 75% to 80% power factor.

AC horsepower ratings are inductive and tested at 40% to 50% power factor.

"L" Rating denotes ability of an AC-only switch to handle the initial high in-rush characteristics of a tungsten filament lamp on AC voltage only.

"T" Rating denotes ability of an AC/DC switch to handle the initial high in-rush characteristics of a tungsten filament lamp on either AC or DC voltage.

All **DC ratings** are 100% resistive only (non-inductive).

Many **AC-only rated** switches can be used in applications where less than 30 volts DC is required, provided current does not exceed full current rating of the switch.

Ampere-rated switches will *not* automatically handle in-rush characteristics of five to six times switch rating.

A



Toggle Switches



Versatile toggle switch family with multiple position configurations.



- Available in single or double pole.
- Perfect for industrial equipment or emergency lighting.
- ½" mounting hole required.
- Specifications: 10 A, 277 V AC / 20 A, 125 V AC

All switches must be installed with a hex nut (provided) behind panel to prevent damage during installation.

Part Number	COW 10	GSW-11*	CON 110		
Part Number	GSW-10	GSW-II"	GSW-110	GSW-121	
Poles		SP	ST		
Pkg Qty	1/card	1/card	1/card	1/card	
Toggle Position	ON-OFF	ON-OFF	ON-OFF	ON-OFF	
Terminal Type	Screw	Screw	"O" Ring & Screw	Spade	
Rating	1½ HP 125-250 V AC	% HP 125-250 V AC	% HP 125-250 V AC	% HP 125-250 V AC	

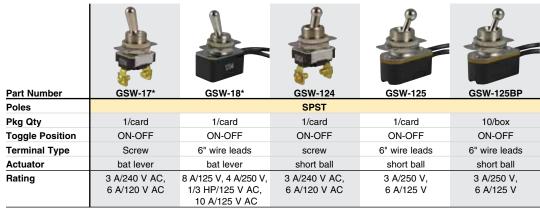
^{*}GSW-11 has an ON-OFF faceplate.

Part Number	GSW-12	GSW-13	GSW-120	GSW-117
Poles		SP	DT	
Pkg Qty	1/card	1/card	1/card 1/card	
Toggle Position	ON-ON	ON-OFF-ON ON-OFF-ON		(ON)-OFF-(ON)
Terminal Type	Screw	Screw	Spade	Screw
Rating	% HP 125-250 V AC	% HP 125-250 V AC	% HP 125-250 V AC	¾ HP 125-250 V AC

⁽⁾ Indicates momentary action

Part Number	GSW-14 GSW-15		GSW-16 GSW-123		
Poles	DP	ST	DPDT		
Pkg Qty	1/card	1/card	1/card	1/card	
Toggle Position	ON-OFF	ON-ON	ON-OFF-ON	(ON)-OFF-(ON)	
Terminal Type	Screw	Screw	Screw	Screw	
Rating	1½ HP 125-250 V AC				

⁽⁾ Indicates momentary action



⁽⁾ Indicates momentary action *GSW-17 & 18 have an ON-OFF faceplate.



Toggle Switch Cover

Tough EDPM rubber covers to protect switches from moisture, dust and dirt.

• Built-in hex nut base screws onto all GB® toggle switches.

Part #	Pkg Qty	Description
GSW-20	2/card	Toggle Switch Cover



Double Insulated, Plastic Toggle Switches



Double insulated for moisture protection in all environments.

- Internal "O" ring design for moisture and dust resistance.
- Perfect for marine/recreational equipment and weather-resistant applications.
- Specifications: 10 A, 277 V AC / 20 A, 125 V AC

Part Number	GSW-19	GSW-114
Poles	SPST	SPDT
Pkg Qty	1/card	1/card
Toggle Position	ON-OFF	(ON)-OFF-(ON)
Terminal Type	Screw	Spade

Momentary Contact Push-Button Switches



Basic push-button switch family utilized in applications requiring intermittent continuity contacts.



- Normally OFF or normally ON models.
- · Screw terminals.
- Mounts in standard ½" diameter hole.
- · Mounting nut included.

Part Number	GSW-22	GSW-23		
Poles	SPST			
Pkg Qty	1/card	1/card		
Toggle Position	OFF (ON)	ON (OFF)		
Terminal Type	screw	screw		
Plating	Black	Red		
Rating	6 A/120 V AC, 3 A/240 V AC	3 A/120 V AC, 1.5 A/277 V AC		



Maintained Contact Push-Button Switch - Motor Rated



Maintained push-button switch rugged and versatile enough to be utilized in many applications.



- Push on, push off switch with #18 AWG, 6" stripped wire leads.
- · Mounting nut included.

Part #	Pkg Qty	Poles	Toggle Position	Terminal Type	Rated
GSW-21	1/card	SPST	Push ON-Push OFF		10 A/125 V AC, 8 A/125 V, 4 A/250 V, 1/3 HP 125 V AC

Horsepower Rating:

"L" Rating Example:

3A/125VL means

the switch is rated to handle the high in-rush from 3 amp

incandescent AC loads.

are inductive and tested at 40%

to 50% power rating.

AC horsepower ratings

Maintained Contact Push-Button Switches



Double insulated for moisture protection in all environments.



• Internal "O" ring design for moisture and dust resistance.

 Perfect for marine/recreational equipment and weather-resistant applications.

• Specifications: 1 A, 125 VT / 6 A, 125 VL / 6 A, 125 V AC / 3 A, 250 V AC

Part Number	GSW-24	GSW-24BP	GSW-25	
Poles		SPST		
Pkg Qty	1/card	10/box	1/card	
Toggle Position	ON-OFF	ON-OFF	ON-OFF	
Terminal Type	6" wire leads	6" wire leads	6" wire leads	
Plating	Nickel	Nickel	Brass	
Circuit	2 pos. 2 wire	2 pos. 2 wire	2 pos. 2 wire	

Single Circuit Pull-Chain Switches



Basic ON-OFF switch family with pull-chain feature.

ON-OFF switch with #18 AWG, 6" stripped wire leads.



- Mounts in $^{13}\!\!/_{32}$ diameter hole (GSW-35 mounts in $^{12}\!\!/$ diameter hole).
- · Color coordinated nickel or brass plated.
- Specifications: 3 A/125 VL, 6 A/125 V AC, 3 A/250 V AC







Variable Speed & Two Circuit Pull-Chain Switches



Pull chain switches for multifunction applications.

- Two and three speed switching.
 - Push-in connections for #18 AWG wire.
 - Mounts in 13/2" diameter hole.
 - Specifications: 6 A/125 V AC, 3 A/250 V AC, 6 A/125 VL

Part Number	GSW-33	GSW-34	GSW-39
Poles	SPDT	SP3T	DP3T
Pkg Qty	1/card	10/box	1/card
Toggle Position	OFF-ON-ON	OFF-ON-ON-ON	OFF-ON(A)-ON(B) -ON(A+B)
Terminal Type	wire leads	wire leads	6" wire leads
Plating	Brass	Brass	Brass
Circuit	3 Pos. 3 Wire	4 Pos. 4 Wire	4 Pos. 3 Wire

Standard Rocker Switches



Heavy-duty rocker switches that fit .830" X 1.45" panel cutouts.



- Frame and rocker are black glass-filled nylon.
- · Lighted or unlighted versions available.
- Specifications: 10 A/277 V AC, 20 A/125 V AC
- Switches with solder terminals come in a phenolic case and do not have a moisture and dust resistant seal.

Appliance Rocker Switches



- Economy rocker switches that fit standard .550" X 1.125" panel cutouts.
- Perfect for machinery or appliances.
- Lighted or unlighted versions available.



 Specifications: 16 A/125 V AC, 8 A/250 V AC



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^{*}Red lighted

Mini Rocker Switch



Miniature rocker switch that fits .520" X .776" panel cutouts.



- Perfect for small machinery or appliances.Lighted or unlighted versions available.
- Specifications: 13 A/125 V AC, 10 A/250 V AC, ½ HP 125 250 V AC.

Part #	Pkg Qty	Poles	Toggle Position	Terminal Type	Rated
GSW-48*	1/card	SPST	ON-OFF	spade	10 A/125 - 250 V AC,
					½ HP 250 V AC. ½ HP 125 V AC







Rotary Switches



Single or three position switches in various fan and lighting applications.



#18 AWG, 6" stripped wire leads.Brass terminals.

Part Number	GSW-61	GSW-63B	GSW-69	GSW-69BP	GSW-62	GSW-68
	G3W-01			G3W-03DF		
Poles		SP	ST		DP3T	SPTT
Pkg Qty	1/card	1/card	1/card	10/box	1/card	1/card
Toggle Position	ON-OFF	ON-OFF	ON-OFF	ON-OFF	OFF-ON(P)-ON(N) -ON(N+P)	OFF-ON(P)-ON(N) -ON(N+P)
Plating / Color	Brass	Black Button	Black Plastic	Black Plastic	Brass	Brass
Rating	6 A/125 V AC, 3 A/250 V AC	1.5 A/250 V AC	6 A/125 V AC, 3 A/250 V AC			
Mounting Hole	.406"	.513"	.513"	.513"	.406"	.513"

Door Switch



Push button switch with metal box, cover plate and mounting hardware to operate lights when door is opened.

- Mounts in door jam.
- Fits in 1.25" X 2.75" X 2.0" deep approximate mounting hole.
- Specifications: 16 A/125 V AC, 10 A/250 V AC, 10 A/277 V AC, ½ HP 125 277 V AC.

