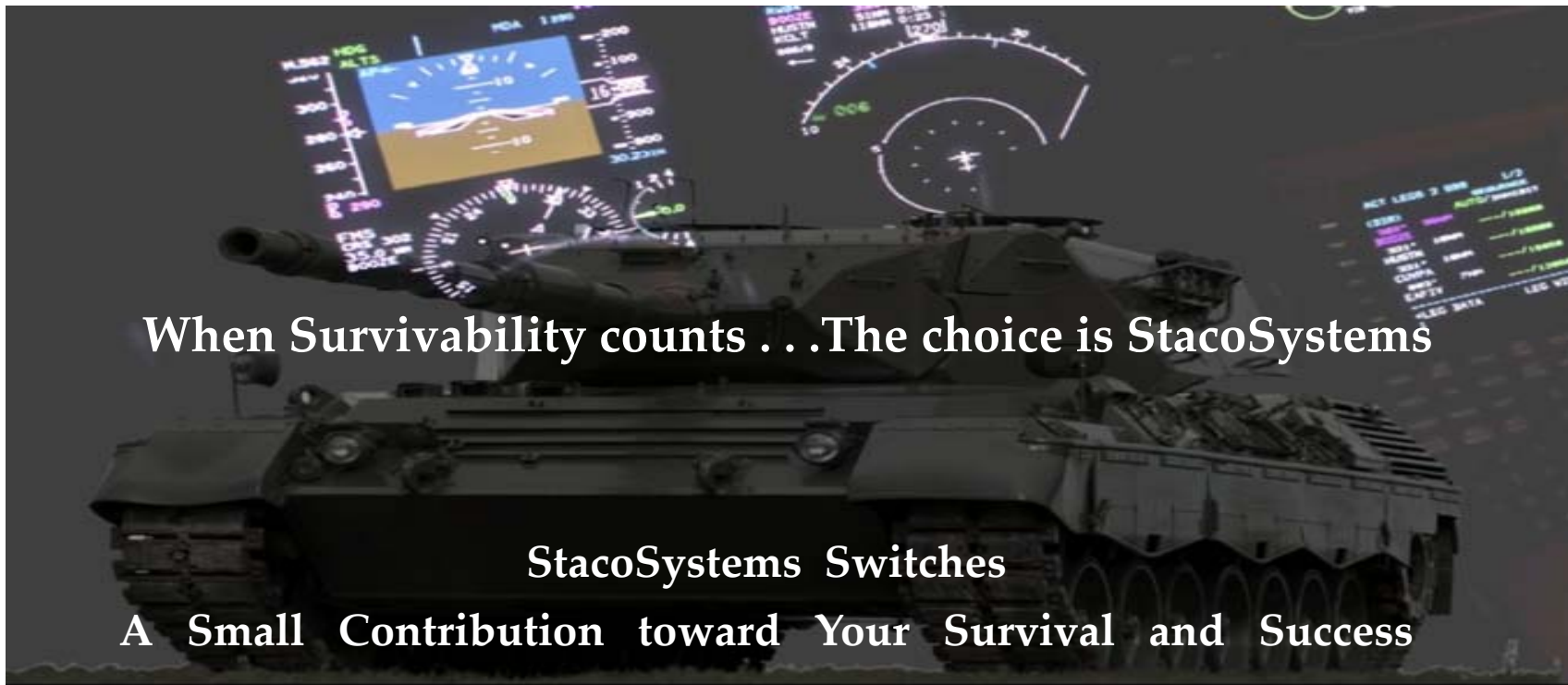

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One Step Ahead

The infantry's need for clear visibility to see what's around the corner before taking action could depend on a Push of a reliable Pushbutton Switch.

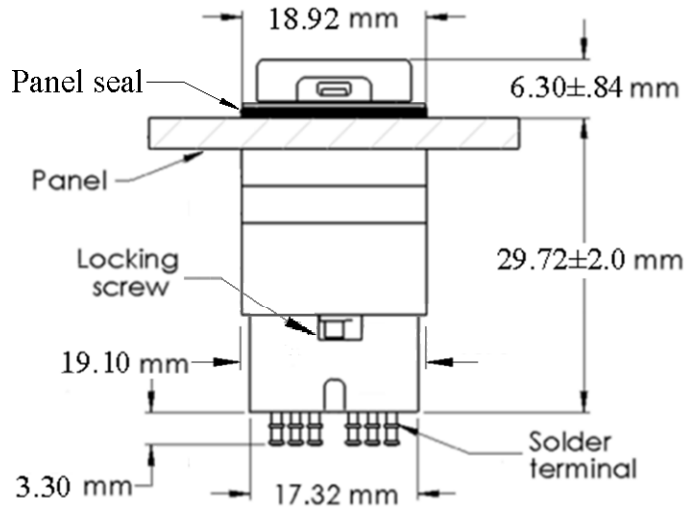
StacoSystems has half-a-century of experience engineering and producing Pushbutton Switches for Aerospace, Military, and Defense forces and now is introducing a Specialized Vehicle Switch "SVS", designed specifically for the Ground Armoured Vehicle market.

This product line embraces Survivability under adverse conditions, without sacrificing performance.

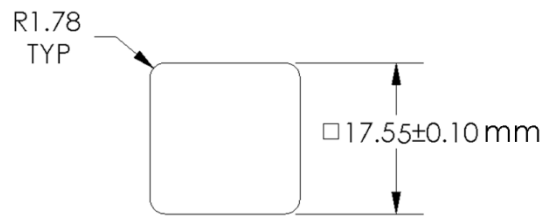


APPLICATION DATA

Envelope

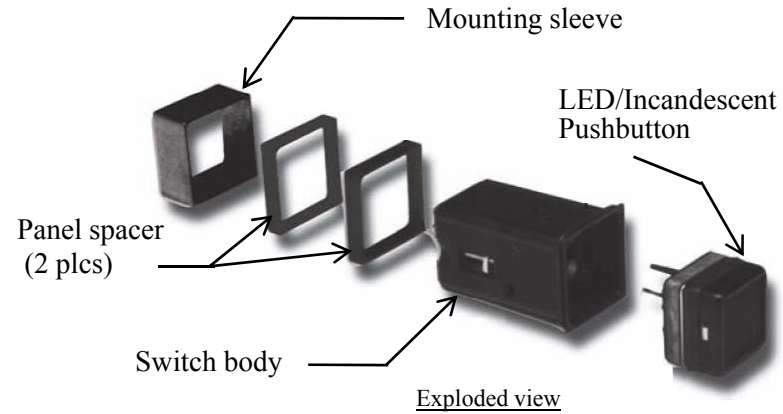


Switch with Pushbutton Assembly - Front view



Panel cutout

Note:
Otherwise specified, tolerances is ± 0.76 mm



Detail data	
Switch / indicator with pushbutton weight	17 grams
Minimum mechanical life	100,000 cycles
Actuation force	9 to 22 N
Cap removal force	9 to 22 N
Mounting panel thickness	22 mm Max
Termination type	Turret solder

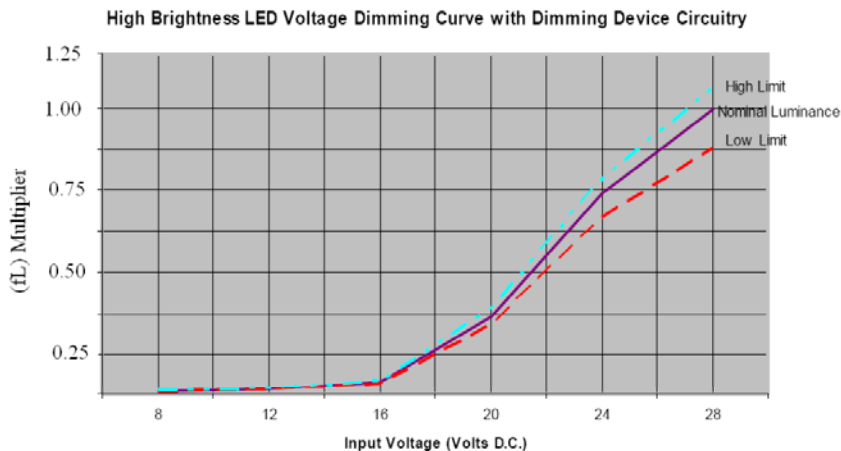
Environmental data	
Operating temperature	-55 C to +85 C
Vibration	15G 10-2000 Hz
Humidity	95%
Shock	75G
Acceleration	20G
EMI/RFI Shielding Efficiency	1000 MHz >60dB

Electrical Characteristics

Switch contact ratings			
Power circuits - silver contacts		Logic circuits - gold plated contacts	
Voltage	25,000 cycles		
28 V DC	Sea level	28 V DC	Sea level
Resistive	7.0 Amps	Resistive	1.0 Amp
Inductive	4.0 Amps	Inductive	0.5 Amp
Lamp	2.5 Amps		
115 V AC, 60 Hz	Sea level	Low Level circuits	
Resistive	7.0 Amps	28 V DC - 30 mA	
Inductive	7.0 Amps		
Lamp	2.0 Amps		
Lamp circuit performances			
Lamp contact resistance		$\leq 0.025 \Omega$	
Dielectric strength		1000 Vrms / 50 Hz	
Insulation resistance at 500 V DC		$> 1000 M \Omega$	

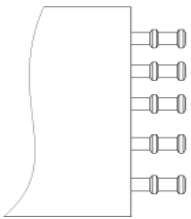
Illuminated Color Limits									
Color	Incandescent		High Brightness LED		Color	Incandescent		High Brightness LED	
	x	y	x	y		x	y	x	y
White	0.480	0.395	0.300	0.270	Lunar white	0.400	0.375	---	---
	0.480	0.435	0.300	0.305		0.400	0.420	---	---
	0.540	0.431	0.365	0.395		0.480	0.375	---	---
	0.540	0.391	0.365	0.360		0.480	0.420	---	---
Red	0.665	SL	0.695	0.285	Lemon yellow	0.552	SL	0.450	0.500
	0.659	0.335	0.705	SL		0.536	0.432	0.475	SL
	0.707	0.287	0.650	0.330		0.524	0.445	0.505	0.445
	0.713	SL	0.660	SL		0.539	SL	0.530	SL
Green	0.300	0.560	0.300	0.560	Blue	0.250	0.330	0.140	0.100
	0.300	SL	0.300	SL		0.250	0.420	0.140	0.190
	0.365	0.560	0.375	0.560		0.330	0.330	0.220	0.100
	0.365	SL	0.375	SL		0.330	0.420	0.220	0.190
Amber	0.582	SL	0.545	0.425	Aviation Green	0.140	0.470	---	---
	0.607	SL	0.560	SL		0.290	0.470	---	---
	0.576	0.418	0.590	0.382		0.030	SL	---	---
	0.600	0.392	0.604	SL		0.185	SL	---	---

•The term "SL" indicates where intersections occur with the spectrum locus on the CIE chromaticity diagram.



Low Level Dimming: The typical voltage controlled dimming range from 7 volts to 28 volts as shown above.

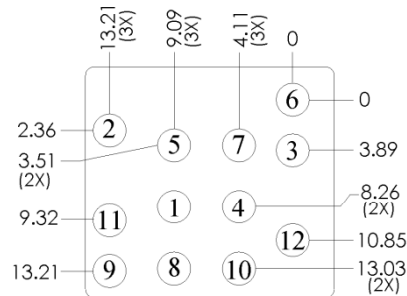
Terminal location and identification



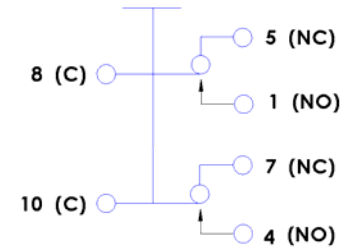
Terminal-Side view



Indicator



Double Pole Double Throw

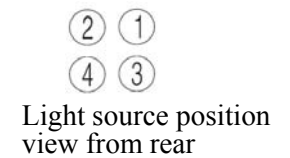


Switch schematics

Incandescent & LED Circuit Diagram

Incandescent Common Bussed				Incandescent Lamp Ground	
Single common bussed Two or three wire system	Horizontal common bussed Three or four wire system	Top common bussed Four or five wire system	Bottom common bussed Four or five wire system	Common ground w/out common bus	Horizontal split ground w/out common bus

Typical 5 Volt High brightness LED		Typical 28 Volt High Brightness LED	
Single common ground	Horizontal split ground	Single common ground	Horizontal split ground













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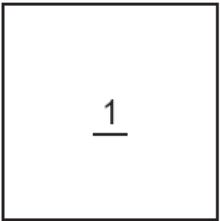
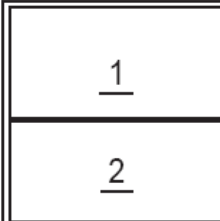
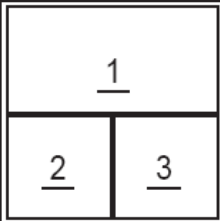
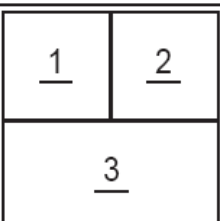
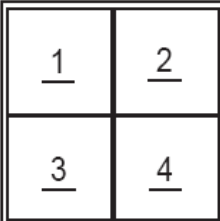
One Step Ahead

STANDARD OPTIONS

Switch / Indicator		Pushbutton			
Switch action	Switch contact	Light source	Common ground	Voltage	Driver circuit - LED
Indicator		Incandescent	Single common	5V	Sourcing / Sinking
Momentary	Silver	High brightness LED	Horizontal split common	28V	Sourcing / Sinking
Alternate	Gold plate			28V	Voltage dimming

Optical Display						Cell Color		
Type Code	NON-ILLUMINATED			ILLUMINATED			Incandescent lamp*	High brightness LED*
	Legend	Background		Legend	Background			
1	Black	Translucent color		Black	Color		White	White
2	Hidden black	Black		Black	Visible in color		Red	Red
3	Hidden	Black		Visible in color	Black		Green	Green
4	Translucent white	Black		Visible in color	Black		Amber	Amber
5	Black	Translucent white		Visible in color	Black		Lunar White	---
							Lemon Yellow	Lemon Yellow
							Blue 3/	Blue
							Green	---

* Color of incandescent lamp and high brightness LED are slightly different.
3/ may not suitable for high intensity light applications

Display Configuration				
Full Screen	2-way split	3-way split		4-way split
				

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One Step Ahead

LOOKING AHEAD

Switch technology developed by StacoSystems is already widely used in a number of Ground Vehicle programs around the world. StacoSystems is able to provide exactly the right kind of Off-The-Shelf and Cost Effective switch for your Ground Vehicle applications.

Further innovative technologies include Reduced Infrared Signature and Improved Brightness Uniformity will follow in the near future. For your multi-form factor panel applications, StacoSystems is the strategic partner.

ABOUT STACOSYSTEMS

For 50 years now, StacoSystems has engineered and produced standard-based and customized switch solutions for Aerospace, Military, and Defense applications. StacoSystems engineering and manufacturing facilities are located in Southern California; working together with streamlined global sales and support services throughout Europe, Americas, and Asia-Pacific, to help customers reduce their time-to-market and gain a competitive advantage.

For more information, please visit: www.stacosystems.com

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