

Description

Single pole, miniaturised aircraft simulator switch with extremely fast magnetic trip time. Blade, screw and wire wrap terminals. Aircraft style threadneck and push/pull button with white trip indicator ring. Current rating marked on the push button according to customer's request by adhesive labels or marking inserts.

US patent number: US 7,038,562 B1

US patent number: US 6,490,141 B2 (moulded threadneck)

Typical applications

Simulators.

Ordering information

Type No.

9510 switch with magnetic instantaneous trip for flight simulators

Mounting method and style

G threadneck mounting with standard push button

Threadneck design

1 M12x1x6.3

2 7/16-32UNx6.3

Number of poles

1 single pole

Accessories for threadneck

2 hex nut M12x1, aluminium, serrated lock washer $\phi 12.1/\phi 17.2$, fitted

3 hex nut 7/16-32UN (aluminium), serrated lock washer 11.3/14.9, fitted

Terminal configuration

J screw terminals with inch thread

1 6-32UNC-2B, silver plated bent 45° inwards

3 6-32UNC-2B, silver plated, with socket, bent 45° inwards

P blade terminals

1 A6.3x0.8 DIN 46244, silver plated

W wire wrap terminal

4 pin size 1.2x1.2 EN 60352-1, gold plated, with socket

Rated voltage

F0 DC 24 V

F1 DC 28 V

Accessories (terminal screws)

B Phillips screw 6-32UNC-2Ax4.8 fitted (MS 51957-25)

Z without accessories

Accessories (terminal washers)

0 without accessories

2 3.6 split washer fitted (MS 35338-136)

Internal circuit

R2 with logic diode

Colour of the push button

S black

A green, for marking insert

B black, for marking insert

0 without marking

1 hot-stamped marking, can be read when locating pin is above

9 without marking insert

Current ratings

0.5...150 A

9510 - G 2 1 3 - J 1 F1 - B 0 R2 S 1 - 5 A ordering example



9510-...

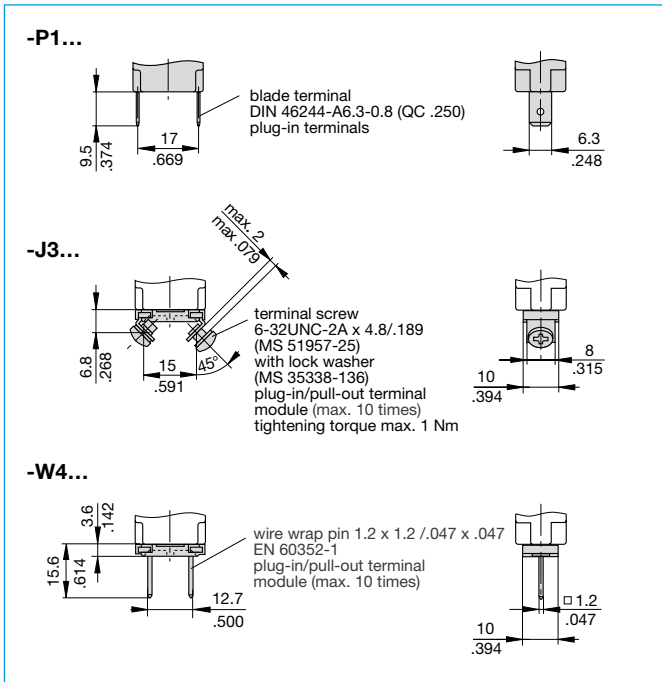
Technical data

Voltage rating (Other voltage ratings upon request)	DC 24 V	DC 28 V
Trip current	< 170 mA	< 200 mA
Trip time	< 25 ms	< 25 ms
Min. switching voltage at +23 °C/+73.4 °F at +60 °C/+140 °F	DC 22 V DC 24 V	DC 25 V DC 28 V
Internal resistance	approx. 153 Ω	approx. 153 Ω
Typical life	10,000 operations at rated voltage	
Temperature range	-30...+60 °C (-22...+140 °F)	
Insulation resistance	> 100 M Ω (DC 500 V)	
Degree of protection (IEC 60529)	operating area IP40 terminal area IP00	
Vibration (sinusoidal)	3 g (57-500 Hz), \pm 0.23 mm (10-57 Hz) to DIN IEC 60068-2-6, test Fc 10 cycles/frequency axis	
Shock	5 g (11 ms), to DIN IEC 60068-2-27, test Ea	
Humidity	240 hours at 95 % RH, 40 °C to DIN IEC 60068-2-3, test Ca	
Mass	23 g without hardware 26 g with hardware	

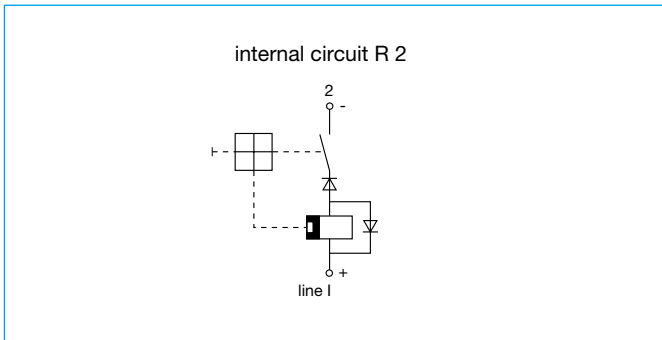
Dimensions



Other main terminal designs



Internal connection diagram



This is a metric design and millimeter dimensions take precedence ($\frac{mm}{inch}$)

Accessories

Label (black) for push/pull button (S0)	
Part number	Rated current (A)
Y 307 082 01	0.5
Y 307 082 02	1/2
Y 307 082 03	1
Y 307 082 04	1.5
Y 307 082 05	1 1/2
Y 307 082 06	2
Y 307 082 07	3
Y 307 082 08	5
Y 307 082 09	7.5
Y 307 082 10	7 1/2
Y 307 082 11	10
Y 307 082 12	15
Y 307 082 13	20
Y 307 082 14	25
Y 307 082 15	30
Y 307 082 16	35
Y 307 082 17	6
Y 307 082 18	40
Y 307 082 19	50
Y 307 082 20	60
Y 307 082 21	70
Y 307 082 22	75
Y 307 082 23	80
Y 307 082 24	90
Y 307 082 25	100
Y 307 082 26	120
Y 307 082 27	125
Y 307 082 28	150
Y 307 082 29	2.5
Y 307 082 30	2 1/2
Y 307 082 31	3 1/2
Y 307 082 32	R
Y 307 082 33	5.5
Y 307 082 34	17
Y 307 082 35	4

Plug-in screw terminal,

bent at 45° inwards (2 pcs needed per unit)

Y 307 187 02 terminal silver plated

Y 304 508 02 Phillips screw 6-32 UNC-2Ax4.8 (MS 51957-25)

Y 304 509 01 split washer (MS 35338-136)

Plug-in blade terminal (2 pcs needed per unit)

Y 307 202 02 P10 terminal silver plated

Plug-in/pull-out screw terminals with socket,

bent at 45° inwards

X 222 173 11 terminals silver plated

Plug-in/pull-out wire wrap terminals with socket

X 222 174 12 terminals gold plated

Splash cover/hex nut assembly with O ring (IP66 and IP67)
(approved to VG 95345, part 23)

X 200 801 03 matt black finish nut M12x1x1.8, black cover

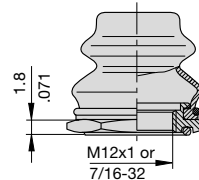
X 200 801 08 nickel plated nut M12x1x1.8, transparent cover

X 200 801 09 matt black finish nut 7/16-32x1x1.8, black cover

X 200 801 10 matt black finish nut 7/16-32x1x1.8,

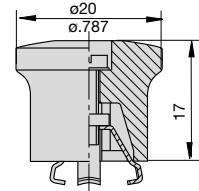
transparent cover

X 200 801 12 with blackened nut and transparent cover



Actuator extension (black) to be fitted on the push button
(approved to VG 95345, T23)

X 200 803 01



Identification collar to be snapped on the push button

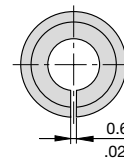
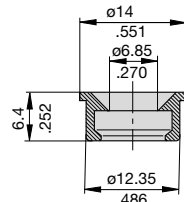
Y 307 004 01 black

Y 307 004 02 white

Y 307 004 03 red

Y 307 004 04 green

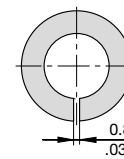
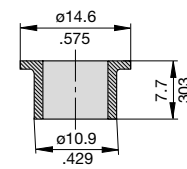
Y 307 004 05 blue



Lock out ring to block the push button in OFF position

Y 307 005 01 red

Y 307 005 02 black



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