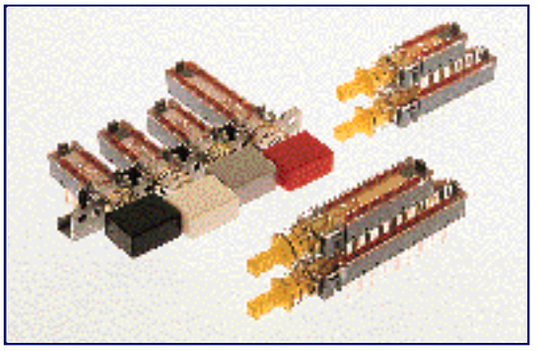
SERIES TA/LT



TA/LT Series push button switches offer an "ultra-lite" alternative to design engineers working in a variety of applications. Available features include:

- Spring loaded, wiping contacts for smooth, silent actuation stroke and excellent reliability
- Up to 16 poles per module
- Mounting chassis available.
- Interlocked assemblies up to 20 stations
- Optional terminal length
- Snap-on buttons
- Solder lugs on top for hand wiring; PC at bottom for flow soldering
- Switch plunger with sliding contacts can be removed from the front without disturbing electrical connections.
- Fixed terminals are epoxied and "staked" in position, providing an extra seal to help prevent wicking of solder or flux.

SPECIFICATIONS

RATING: 0.5 A@ 100 VAC, 0.2A@ 250 VAC, 1A@ 25 V D C
CONTACT RESISTANCE: 20 mΩ typical
INSULATION RESISTANCE: Adjacent Contacts — 2 x 10^{12} Ω min.
(Dry Condition)
DIELECTRIC STRENGTH: 1,500 V RMS min.
LIFE CYCLE: 100,000 cycles min.
OPERATING TEMPERATURE RANGE: -20° to + 70°C
FUNCTIONS AVAILABLE:
GR = Interlocking
O A= Momentary
EE = Latching
TA= Standard Operating Force (See Next Page)
LT = Light Touch Operating Force (See Next Page)
S = Shorting (MBB)
N= Non-Shorting (BBM)

MATERIALS

HOUSING: Polycarbonate (UL94-HB) Std.
Valox (UL94-VO)
PLUNGER: Duracon (UL94-HB) Std.
Valox (UL94-VO)
TERMINAL BOARD: Polycarbonate (UL94-HB) Std.
MOVING CONTACTS: Silver plated copper alloy
Gold plate over nickel plated copper alloy
FIXED CONTACTS: Copper alloy with silver plate over nickel plate
TERMINAL SEAL: High strength bonding red resin
RELEASE BAR: Steel / zinc plated
CHASSIS: Steel / Nickel plated or steel/zinc plated

HOW TO ORDER INDIVIDUAL MODULES

Series (Operating Force)	Pole	Mechanical Configuration	Termination	Contact Material	Housing/Plunger Material	Timing	Cap	Cap Color
TA	2U	EE= Latching	A	AG= Silver	P= UL94HB	N= BBM	TAA[1]	Blk
LT	4U	OA= Momentary	B	AU= Gold	V= UL94VO	S= MBB	TAB[2]	Wht
	6U		C				TAC[1]	Gry
	8U		E				TAD[1]	Red
	10U		F				TAE[1]	Blu
	16U						TAG[2]	Chr
							TAK[3]	
							TAL[3]	Blk
							TAM[4]	Gry
							TA12	Yel
							TA2800[5]	Blu
							.08	Red
							.09	Grn
							.094	Wht

*Retentive (Snap In) pins available; please contact E-Switch for Specifications.

[1]Blk, Gry, Wht, Red Only
[2]Blk, Gry, Wht, Red, Chr Only
[3]Blk & Gry Only
[4]Blk, Gry, Wht Only
[5]Blk & Red Only

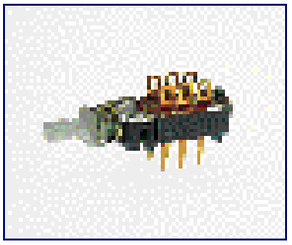
Example:

TA → 10U → OA → E → AU → P → S → TA12 → Blu

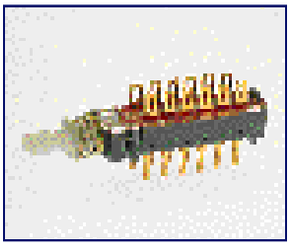
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

Phone: 612-504-3525 Fax: 612-531-8235 E-SWITCH® 7153 Northland Dr., Brooklyn Park, MN 55428

TA2UEEA

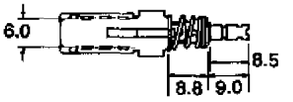


TA4UEEA



MODULE SCHEMATICS

TOP



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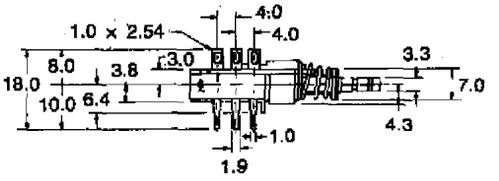

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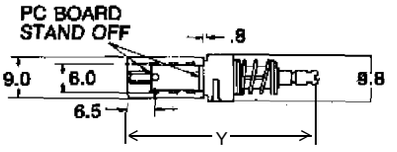


CIRCUIT OPTIONS

2U = DPDT	8U = 8PDT
4U = 4PDT	10U = 10PDT
6U = 6PDT	16U = 16PDT

TRAVEL	4.8
TRAVEL TO LOCK	3.3
TOLERANCE	±0.2MM

POLE DIMENSIONS

	Y
2PDT	42.15
4PDT	54.15
6PDT	66.15
8PDT	78.15
10PDT	90.15
16PDT	126.15

OPERATING FORCE OPTIONS

(TA) STANDARD OPERATING FORCE

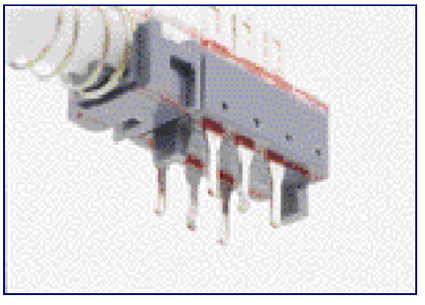
2PDT≤700 grams
4PDT≤700 grams
6PDT≤1000 grams
8PDT≤1000 grams
10PDT≤1200 grams
16PDT≤1200 grams

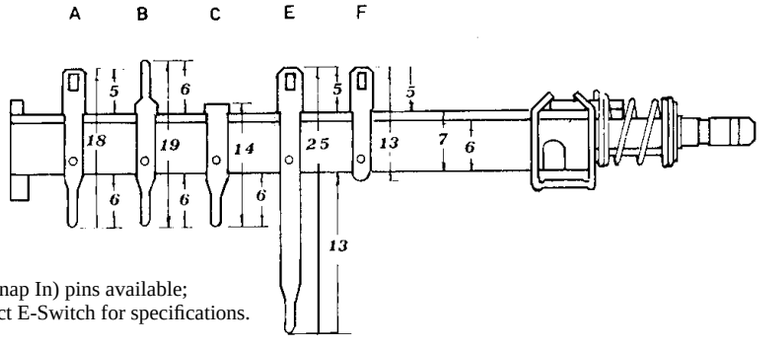
(LT) LIGHT TOUCH OPERATING FORCE

2PDT≤250 grams
4PDT≤400 grams
6PDT≤650 grams

TERMINATION OPTIONS

RETENTIVE PIN OPTION





*Retentive (Snap In) pins available;
please contact E-Switch for specifications.

PLATING, MATERIAL & TIMING OPTIONS

PLATING

AG = Silver
AU = Gold

MATERIAL

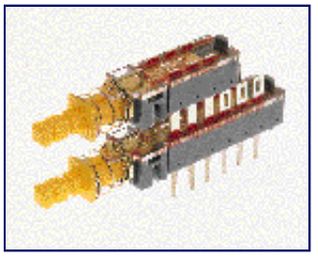
P = Polycarbonate UL94HB
V = Valox UL94VO

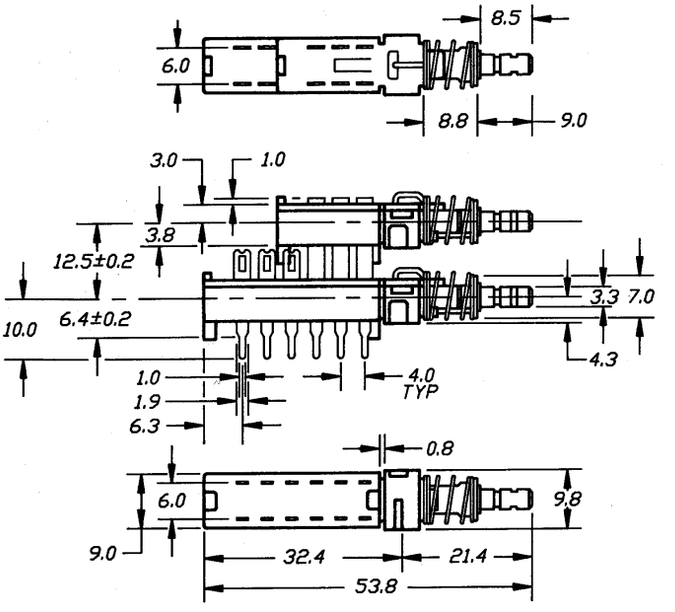
TIMING

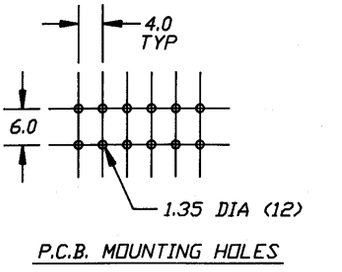
N = (BBM) Non-Shorting
S = (MBB) Shorting

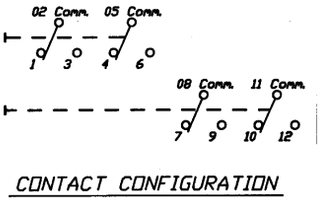
LIGHT TOUCH PIGGYBACK

A020901

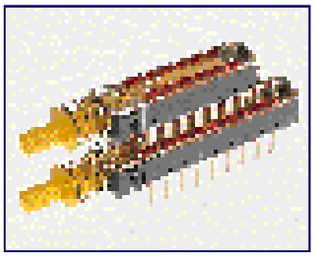


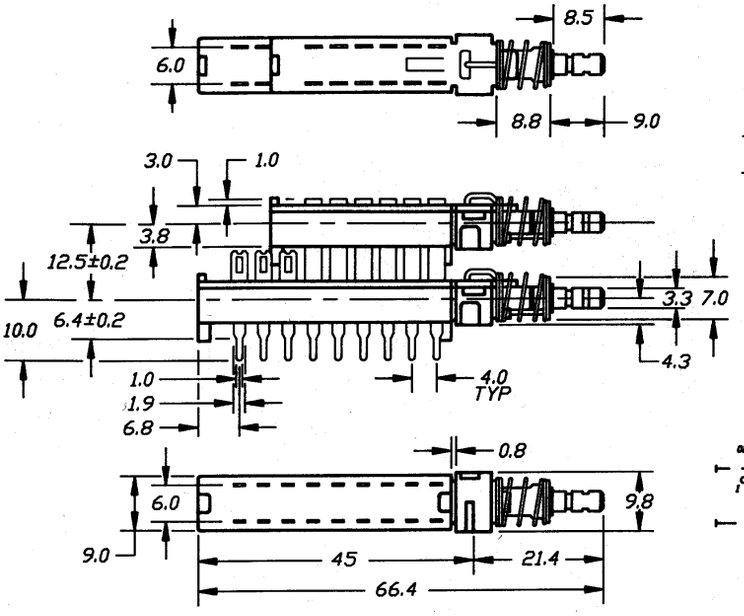


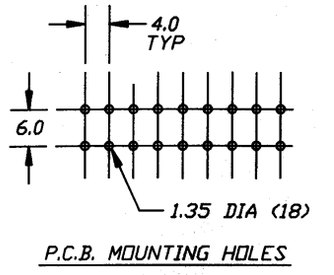


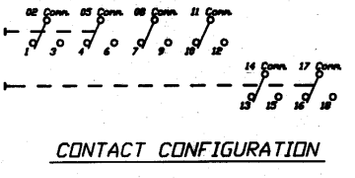


A020903









The light touch piggyback is often used where space is a premium or where 2 vertical push buttons are required. The top switch mechanism controls the front terminals. The bottom switch mechanism controls the back terminals.

HOW TO ORDER
LIGHT TOUCH PIGGYBACK MODULES

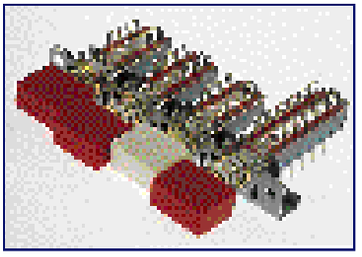
To order, simply give model number:

MODEL NUMBER:
A020901
A020903

Phone: 612-504-3525 Fax: 612-531-8235 E-SWITCH® 7153 Northland Dr., Brooklyn Park, MN 55428

CHASSIS & ASSEMBLY

ASSEMBLY CHASSIS



THE ABOVE EXAMPLE SHOWS:

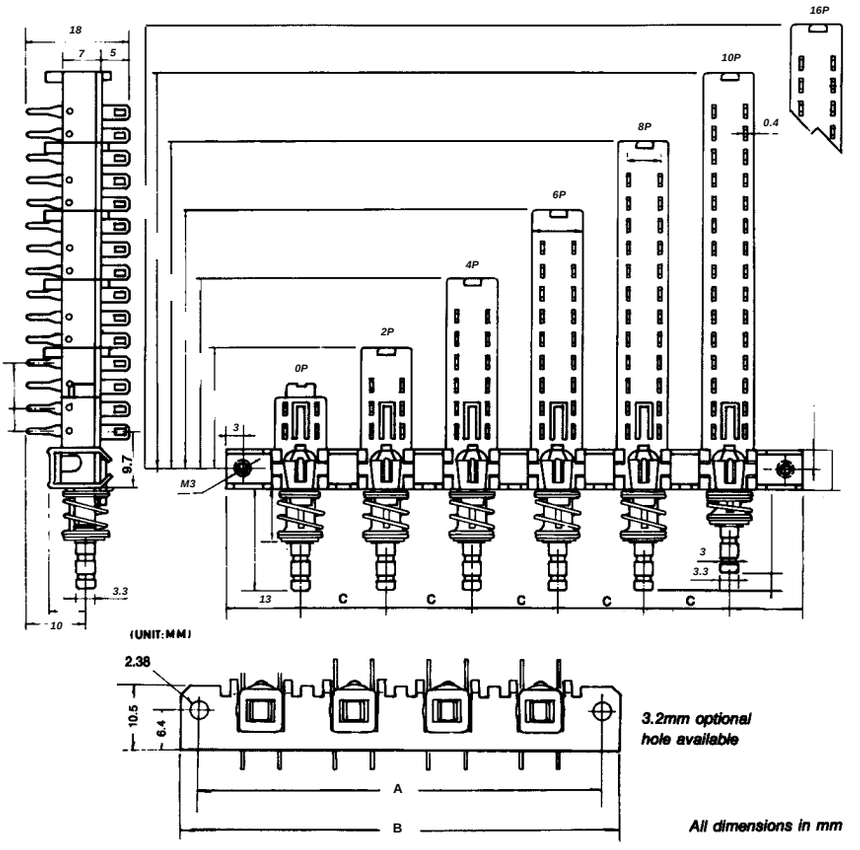
- A 4 station TA switch
- 15mm spacing
- All buttons TAB/RED except station 3 which is TAB/WHT
- First 3 stations are 2 pole switches, interlocked
- Station 4 is 4 pole momentary switch
- All switches have standard terminal type A

WHEN ORDERING ASSEMBLY:

(See Next Page For Ordering Procedure)

1. When applicable, state whether buttons are to be mounted horizontally or vertically.
2. Please state if buttons are to be shipped bulk.
3. State requirement for cut mounting tabs on chassis in exception area.
4. Inquire about non-standard mounting holes on chassis ends.

REFERENCE DIAGRAMS



Tolerance ± .2mm

STANDARD CHASSIS DIMENSIONS (refer to above schematics)

Number of Stations		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
'C' Dim. 10mm	'A' Dim.	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210
	'B' Dim.	36	46	56	66	76	86	96	106	116	126	136	146	156	166	176	186	196	206	216
'C' Dim. 12.5mm	'A' Dim.	32.5	45	57.5	70	82.5	95	107.5	120	132.5	145	157.5	170	182.5	195	207.5	220	232.5	245	257.5
	'B' Dim.	38.5	51	63.5	76	88.5	101	113.5	126	138.5	151	163.5	176	188.5	201	213.5	226	238.5	251	263.5
'C' Dim. 15mm	'A' Dim.	35	50	65	80	95	110	125	140	155	170	185	200	215	230	245	260	275	290	305
	'B' Dim.	41	56	71	86	101	116	131	146	161	176	191	206	221	236	251	266	281	296	311
'C' Dim. 17.5mm	'A' Dim.	37.5	55	72.5	90	107.5	125	142.5	160	177.5	195	212.5	230	247.5	265	282.5	300	317.5	335	352.5
	'B' Dim.	43.5	61	78.5	96	113.5	131	148.5	166	183.5	201	218.5	236	253.5	271	288.5	306	323.5	341	358.5
'C' Dim. 20mm	'A' Dim.	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400
	'B' Dim.	46	66	86	106	126	146	166	186	206	226	246	266	286	306	326	346	366	386	406

HOW TO ORDER SINGLE STATION ASSEMBLIES

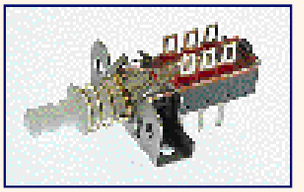
Number of Switches Per Chassis	Series (Operating Force)	Chassis Spacing	Cap	Cap Color	Pole	Mechanical Configuration	Termination	Contact Material	Housing & Plunger Material	Timing	Exceptions to Part Number By Station
1* *Single Key Chassis	TA LT	0003-00 0003-02 0003-03	TAA[1] TAB[2] TAC[1] TAD[1] TAE[1] TAG[2] TAK[3] TAL[3] TAM[4] TA12 TA2800[5]	Blk, Wht Gry, Red Blu, Chr	2U 4U 6U 8U 10U 16U	EE= Latching OA= Momentary	A B C E F	AG= Silver AU= Gold	P= Standard V= Valox	N= BBM S= MBB	(None)
			.08 .09 .094	Blk, Gry Yel, Blu Red, Grn Wht							
			TH100 TH120 TH201	Wht, Yel Orn, Grn Blu							

Desc. (TA0003-00)
ID# AO21251
Standard
2.38 mm holes (.094)

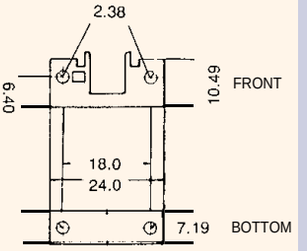
Desc. (TA0003-02)
ID# A021276
Tapped For 4-40 screws

Desc. (TA0003-03)
ID# A021252
3.18 mm holes (.125)

SINGLE KEY CHASSIS



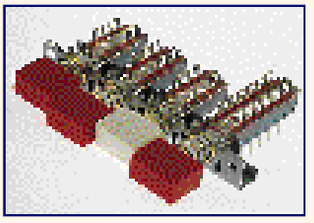
TA0003-00



HOW TO ORDER MULTISTATION ASSEMBLIES

2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	TA LT	In mm: 10 (.394") 12.5 (.492") 15 (.591") 17.5 (.689") 20 (.787")	TAA[1] TAB[2] TAC[1] TAD[1] TAE[1] TAG[2] TAK[3] TAL[3] TAM[4] TA12 TA2800[5]	Blk, Wht Gry, Red Blu, Chr	2U 4U 6U 8U 10U 16U	EE= Latching OA= Momentary GR= Interlocked	A B C E F	AG= Silver AU= Gold	P= Standard V= Valox	N= BBM S= MBB	See Below for Procedure
			.08 .09 .094	Blk, Gry Yel, Blu Red, Grn Wht							
			TH100 TH120 TH201	Wht, Yel Orn, Grn Blu							

ASSEMBLY CHASSIS



[1]Blk, Gry, Wht, Red Only
[2]Blk, Gry, Wht, Red, Chr Only
[3]Blk & Gry Only
[4]Blk, Gry, Wht Only
[5]Blk & Red Only

Exceptions to Part Number:

List By Chassis Station #

examples: Station4=4UOA
Station3=TAB/Wht

ORIENTATION: PC pins down, plungers forward– station No. 1 on left.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

Example:

12x → TA → 15 → (TAB/Red) → 2U → EE → A → AG → P → N

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