Toggle Switches, Tiny, Part Number Matrix

MATERIAL SPECIFICATIONS:

Contacts……Gold over nickel or silver plate
Case Material……Thermoplastic 94V-0
Terminals/Fixed Contacts…….Tin lead plate
Terminal Seal……...Epoxy on single pole, optional on double pole
Process Seal……..ES version only (see page C16 - C17)

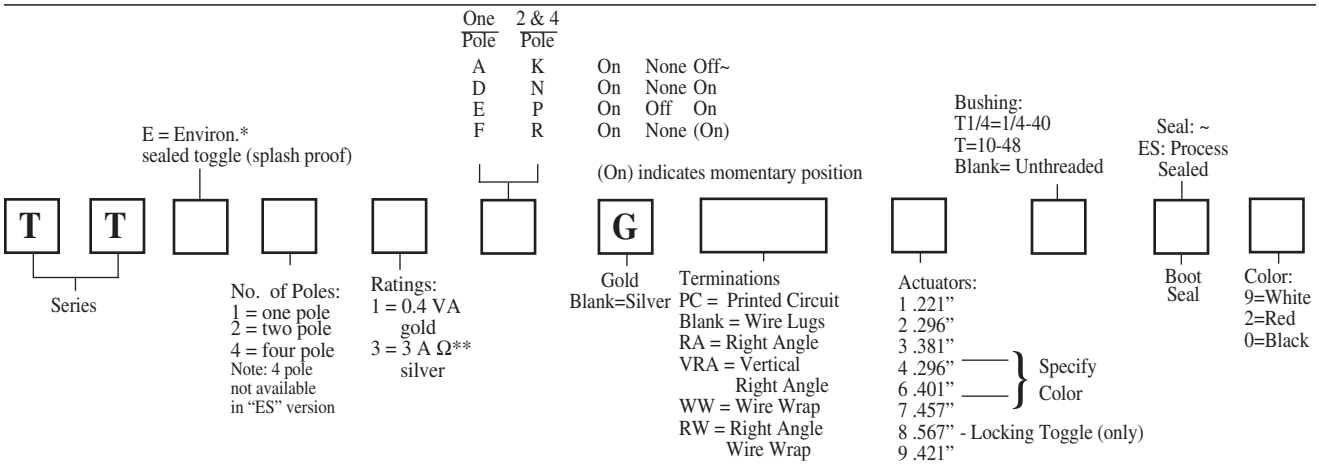
ENVIRONMENTAL SPECIFICATIONS

Operating Temperature……-22°F to +185°F (-30°C to +85°C)
Storage Temperature……-67°F to +185°F (-55°C to +85°C)
Solder Heat Resistance……See page M3-4
U.L. (File E-46765)……Silver only

TYPICAL PERFORMANCE CHARACTERISTICS:

Contact Rating……..	Gold: 0.4 VA max. @ 20 VDC or peak AC Silver (2 pos.): 3A @ 125 VAC or 28 VDC Silver (3 pos.): 2 A @ 125 VAC or 28 VDC
Initial Contact Resistance……	20 Milliohms max.
Contact Timing……..	Break before Make
Insulation Resistance……	1,000 Megohms 500 VDC min.
Dielectric Strength……	1,000 Volts RMS @ sea level
Plunger/Actuator Travel……	26°
High Torque Bushing Shoulder	Yes
Life Expectancy……	See chart below

Note: Hardware included with switch



Tiny toggle switch life expectancy chart

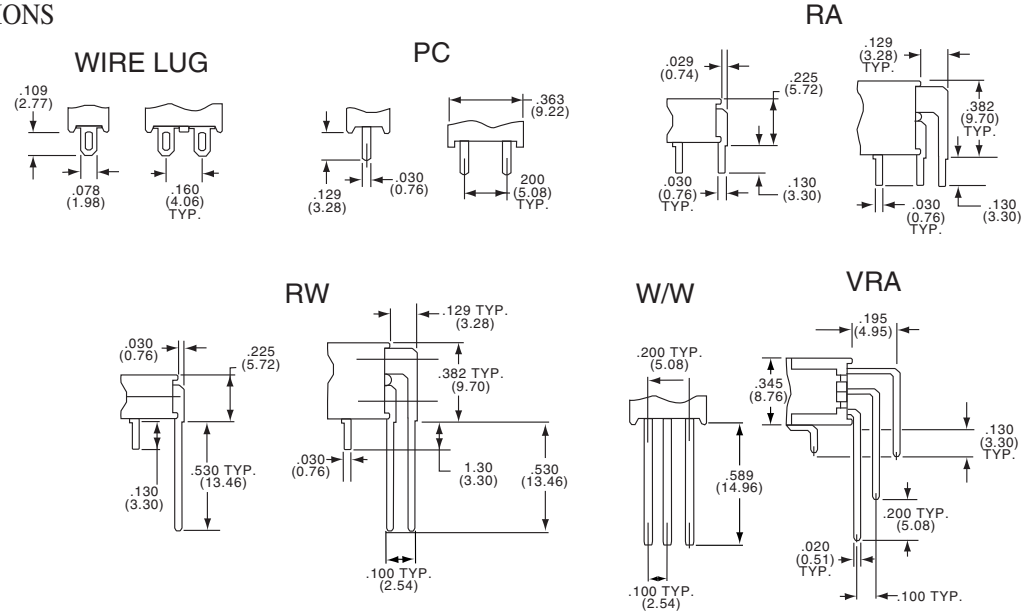
One Pole	0.4VA	80,000 (2 Pos.)	60,000 (3 Pos.)
	3 Amp	20,000 (2 Pos.)	10,000 (3 Pos.)
Two Pole	0.4VA	80,000 (2 Pos.)	60,000 (3 Pos.)
	3 Amp	20,000 (2 Pos.)	10,000 (3 Pos.)
Four Pole	0.4VA	80,000 (2 Pos.)	60,000 (3 Pos.)
	3 Amp	20,000 (2 Pos.)	10,000 (3 Pos.)

APPLICATION NOTE:
For surface mount termination, use the "TST" series on page C5.
For 3 pole refer to the MT Series on page C43

Actuator Dimensions shown with
1,2,3,4,6 — 10-48 bushing
7,8,9 — 1/4-40 bushing

* Not available on 7 actuator or with VRA.
** Not available in RA.
Ω Available in PC & WL only.
~ Available in WL & PC only.

TERMINATIONS



Catalog 1308390
Issued 9-04
www.tycoelectronics.com

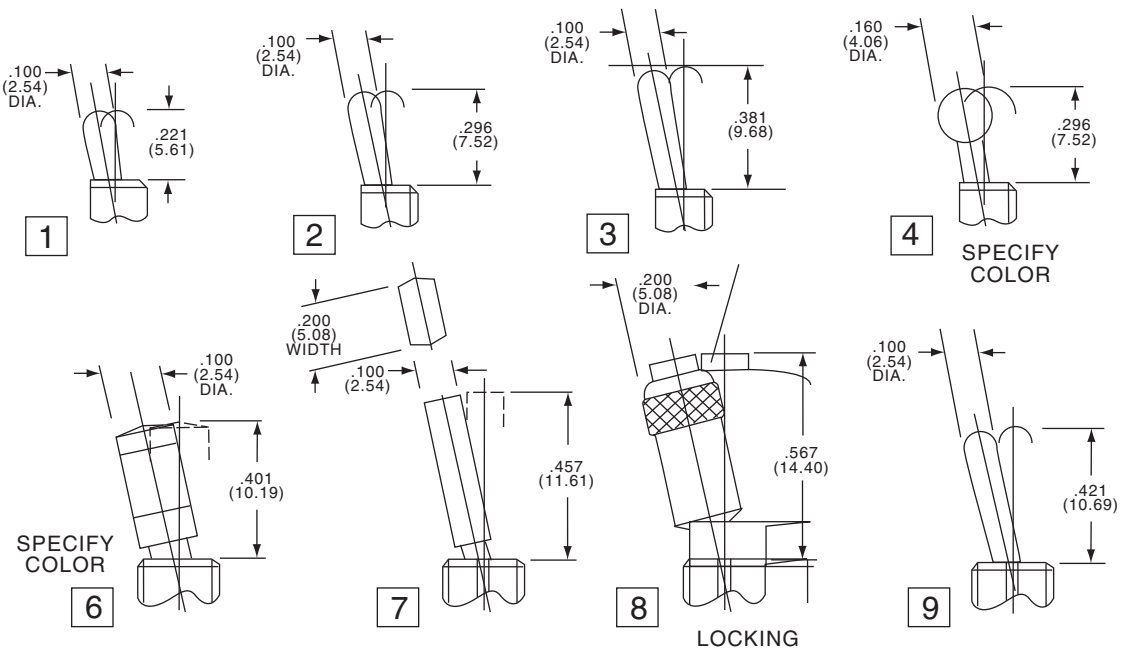
Dimensions are in inches and millimeters unless otherwise specified. Values in parentheses or brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

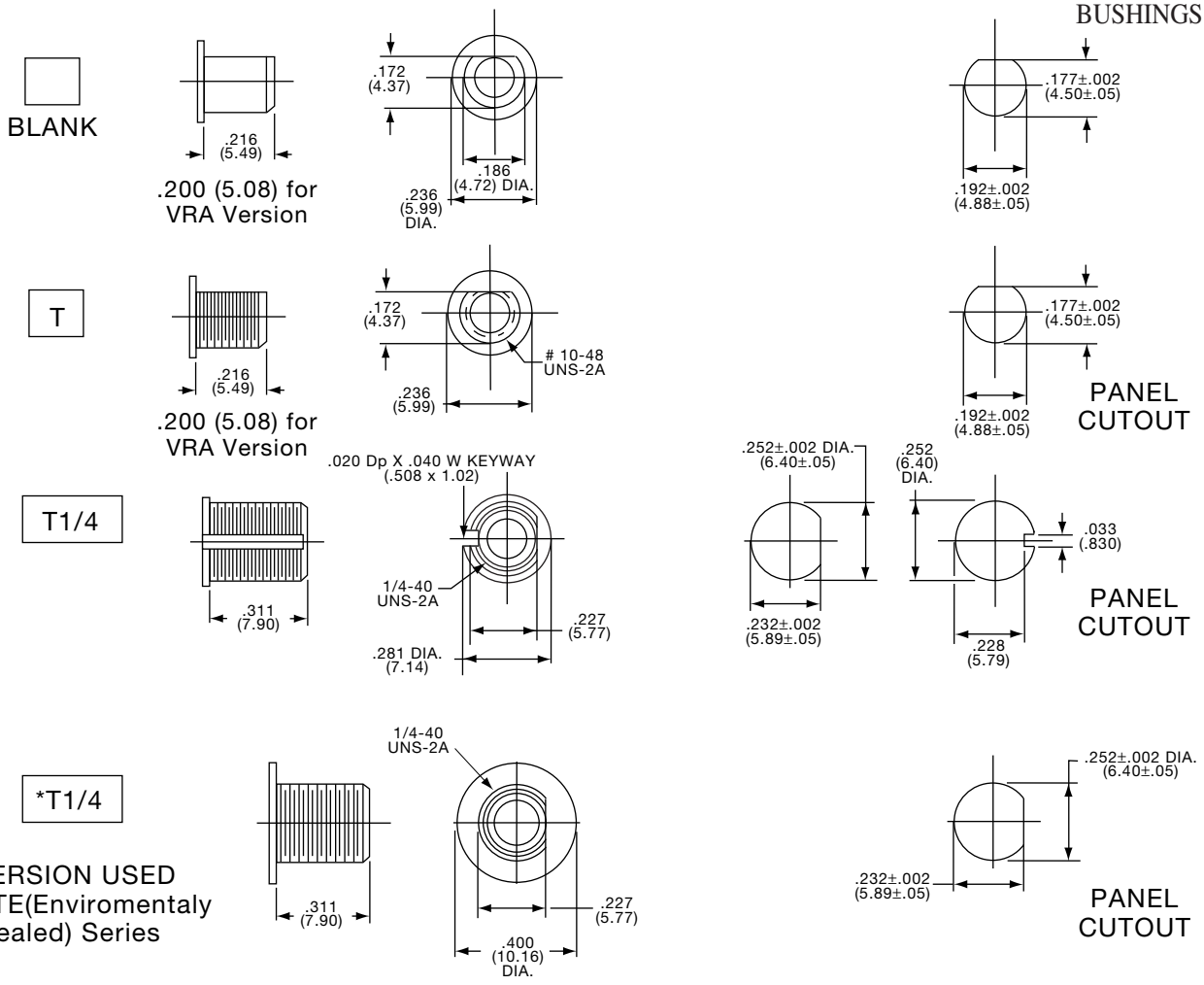
USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425
South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Toggle Switches, Tiny, Actuator and Bushing Options

Toggle Cap Series C-11* Available



BUSHINGS



*VERSION USED ON TTE(Enviromentaly Sealed) Series

Catalog 1308390
Issued 9-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in parentheses or brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

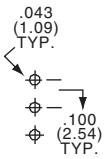
USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425
South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

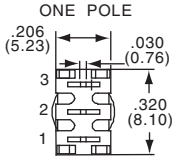
C

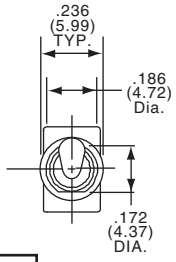
TT Series

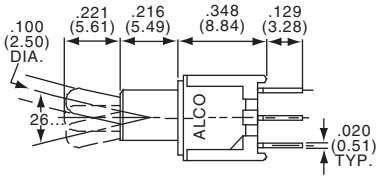
Toggle Switches, Tiny, Vertical, PC Mount

1 POLE









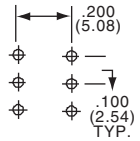
Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	↘ ⊥ ↙
2-1437561-3	TT11AGPC1	SPST	A	On None Off
2-1437561-6	TT11DGPC1	SPDT	D	On None On
5-1437561-1	TT11EGPC1	SPDT	E	On Off On

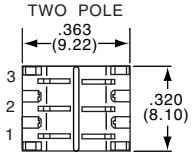
Note: No center terminal on "A" switches

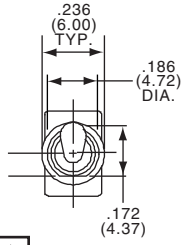
For Terminal Connections refer to Code Chart (see page M5-6)

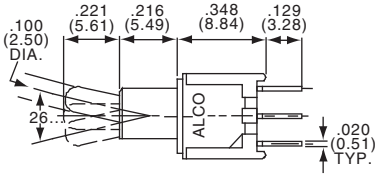
TT11DGPC1

2 POLE









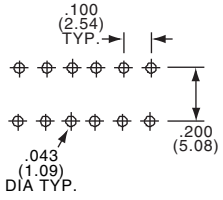
Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	↘ ⊥ ↙
9-1437561-9	TT21KGPC1	DPST	K	On None Off
1437562-3	TT21NGPC1	DPDT	N	On None On
3-1437562-4	TT21PGPC1	DPDT	P	On Off On

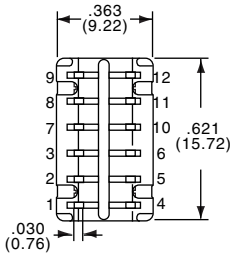
Note: No center terminal on "K" switches

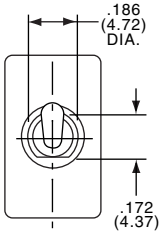
For Terminal Connections refer to Code Chart (see page M5-6)

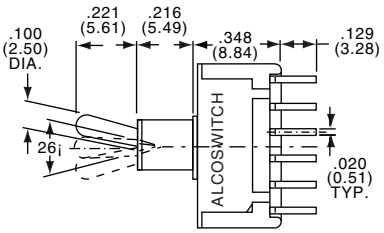
TT21NGPC1

4 POLE

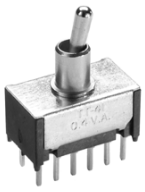








Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	↘ ⊥ ↙
6-1437562-6	TT41NGPC1	4PDT	N	On None On



TT41NGPC1

Catalog 1308390
Issued 9-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in parentheses or brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Toggle Switches, Tiny, Vertical and Vertical Right Angle, PC Mount

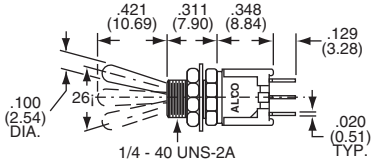
SEE PAGE C8 FOR PRODUCT SPECIFICATIONS

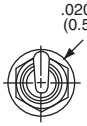
For terminal connections refer to Code Chart on page M5-6

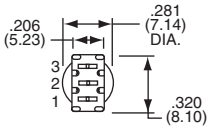
1 & 2 POLE

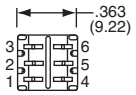
TT21NGPC9T1/4

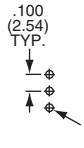
TT11DGPC9T14

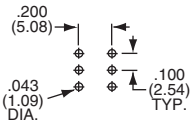




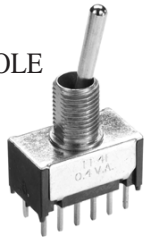








4 POLE



TT41NGPC9T1/4

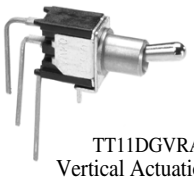
Tyco Electronics	Alcoswitch	Type	Act. Code	P.	M5	Tyco Electronics	Alcoswitch	Type	Act. Code	P.	M5
2-1437561-5	TT11AGPC9T1/4	SPST	A		On None Off	1-1437562-1	TT21NGPC9T1/4	DPDT	N		On None On
3-1437561-5	TT11DGPC9T1/4	SPDT	D		On None On	3-1437562-8	TT21PGPC9T1/4	DPDT	P		On Off On
5-1437561-9	TT11EGPC9T1/4	SPDT	E		On Off On	4-1437562-6	TT21RGPC9T1/4	DPDT	R		On None (On)
7-1437561-3	TT11FGPC9T1/4	SPDT	F		On None On	6-1437562-8	TT41NGPC9T1/4	4PDT	N		On None On
1437562-1	TT21KGPC9T1/4	DPST	K		On None Off	7-1437562-5	TT41PGPC9T1/4	4PDT	P		On Off On

Note: No center terminal on "A" or "K" switches.

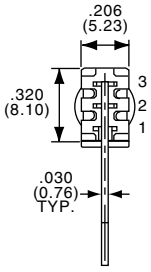
(On) indicates momentary position.

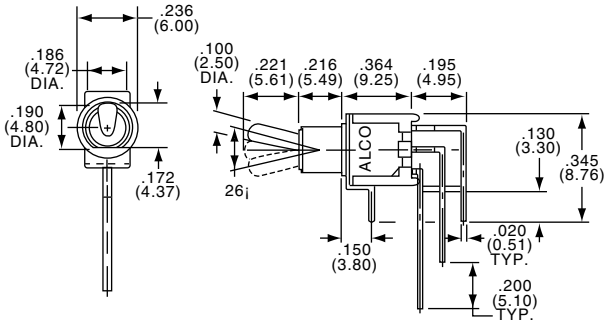
Note: Hardware Included

1 & 2 POLE

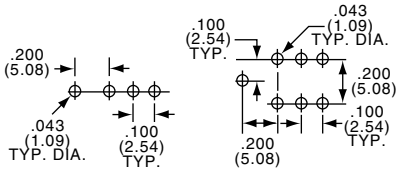


TT11DGVRA1
Vertical Actuation



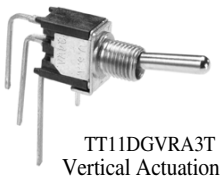


TT21NGVRA1
Vertical Actuation

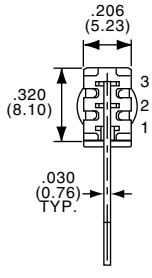


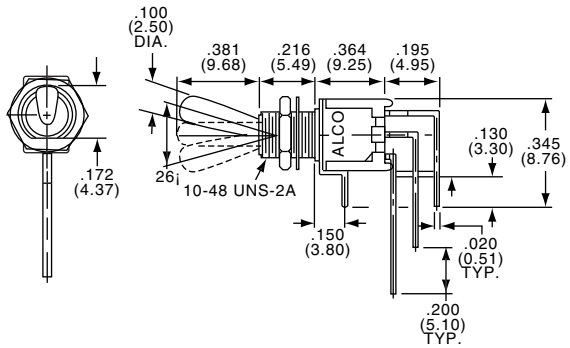
Tyco Electronics	Alcoswitch	Type	Act. Code	P.	M5
4-1437561-8	TT11DGVRA1	SPDT	D		On None On
6-1437561-9	TT11EGVRA1	SPDT	E		On Off On
2-1437562-2	TT21NGVRA1	DPDT	N		On None On
4-1437562-3	TT21PGVRA1	DPDT	P		On Off On

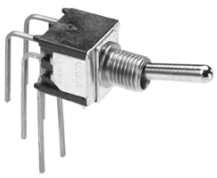
1 & 2 POLE



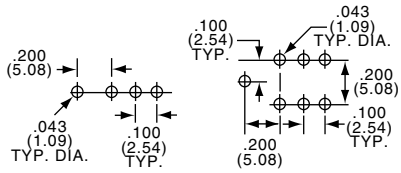
TT11DGVRA3T
Vertical Actuation







TT21NGVRA3T
Vertical Actuation



Tyco Electronics	Alcoswitch	Type	Act. Code	P.	M5
4-1437561-9	TT11DGVRA3T	SPDT	D		On None On
7-1437561-0	TT11EGVRA3T	SPDT	E		On Off On
2-1437562-3	TT21NGVRA3T	DPDT	N		On None On

Catalog 1308390
Issued 9-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in parentheses or brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

C

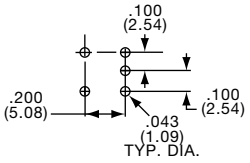
TT Series

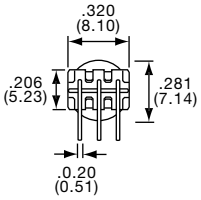
Toggle Switches, Tiny, Right Angle, Flat Actuator

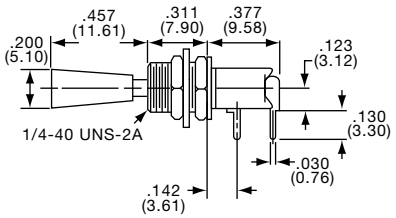
SEE PAGE C8 FOR PRODUCT SPECIFICATIONS

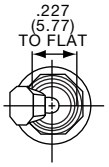
*** Refer to Page C8 for Other Options ***

1 & 2 POLE FLAT

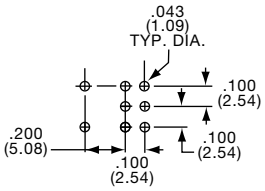


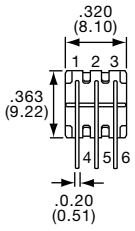


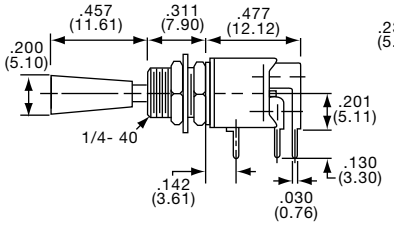


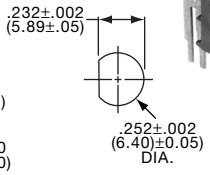


TT11DGRA7T1/4
Horizontal Actuation







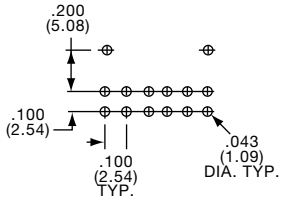


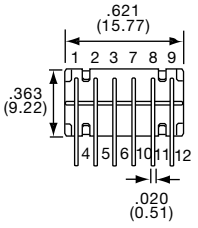
TT21NGRA7T1/4
Horizontal Actuation

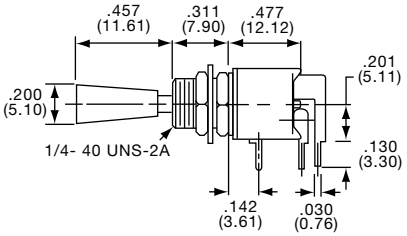
Tyco Electronics	Alcoswitch	Type	Act. Code P. M5			
4-1437561-5	TT11DGRA7T1/4	SPDT	D	On	None	On
6-1437561-7	TT11EGRA7T1/4	SPDT	E	On	Off	On
7-1437561-4	TT11FGRA7T1/4	SPDT	F	On	None	(On)
1-1437562-9	TT21NGRA7T1/4	DPDT	N	On	None	On
4-1437562-0	TT21PGRA7T1/4	DPDT	P	On	Off	On
		(On) indicates momentary position				

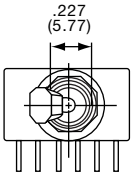
Pinned for Anti-Rotation

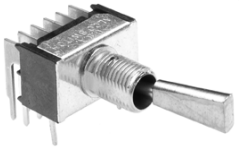
4 POLE FLAT



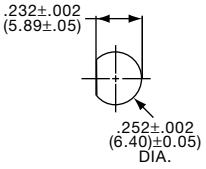








TT41NGRA7T14
Horizontal Actuation



Tyco Electronics	Alcoswitch	Type	Act. Code P. M5			
7-1437562-2	TT41NGRA7T1/4	4PDT	N	On	None	On

Pinned for Anti-Rotation

Catalog 1308390
Issued 9-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in parentheses or brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

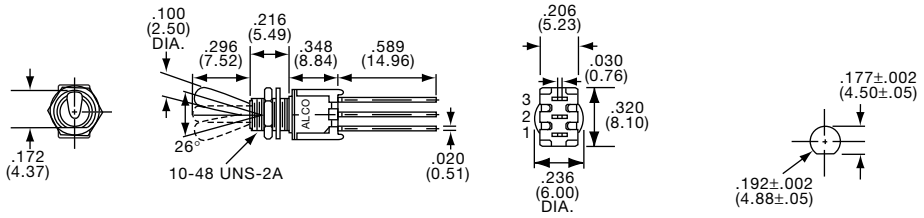
Toggle Switches, Tiny, Wire Wrap Termination

SEE PAGE C8 FOR PRODUCT SPECIFICATIONS

For terminal connections refer to Code Chart on page M5-6

1 POLE

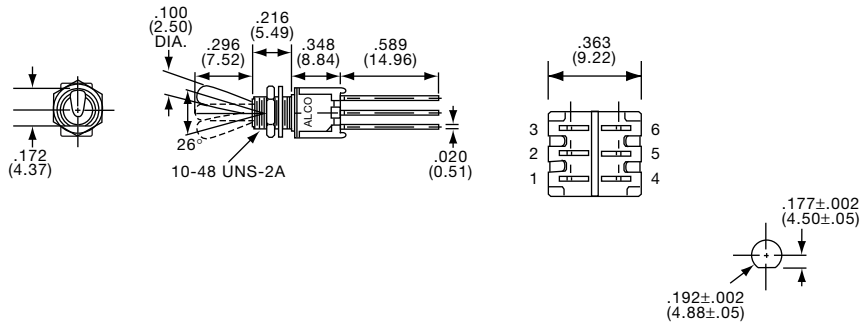
TT11DGWW2T



Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	
5-1437561-0	TT11DGWW2T	SPDT	D	On None On
7-1437561-1	TT11EGWW2T	SPDT	E	On Off On

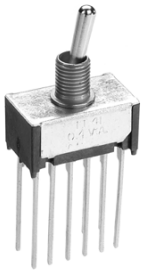
2 POLE

TT21NGWW2T

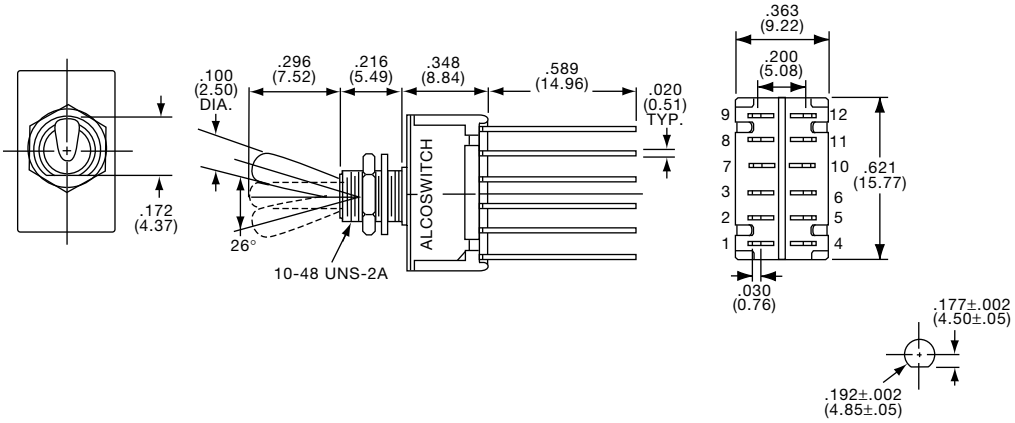


Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	
2-1437562-4	TT21NGWW2T	DPDT	N	On None On
4-1437562-4	TT21PGWW2T	DPDT	P	On Off On

4 POLE



TT41NGWW2T



Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	
7-1437562-4	TT41NGWW2T	4PDT	N	On None On

Catalog 1308390
Issued 9-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in parentheses or brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425
South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

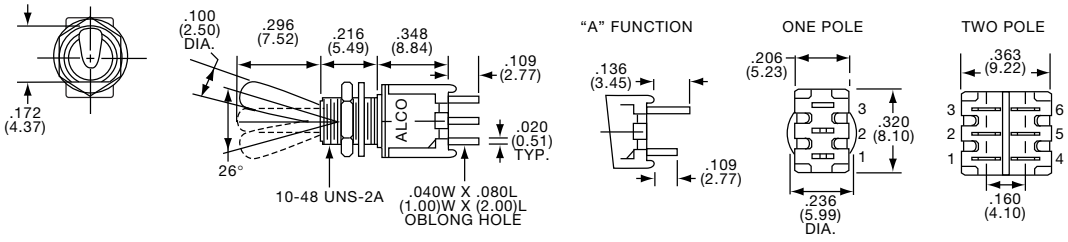
Toggle Switches, Tiny, Wire Lug, Round or Flat Actuators

SEE PAGE C8 FOR PRODUCT SPECIFICATIONS

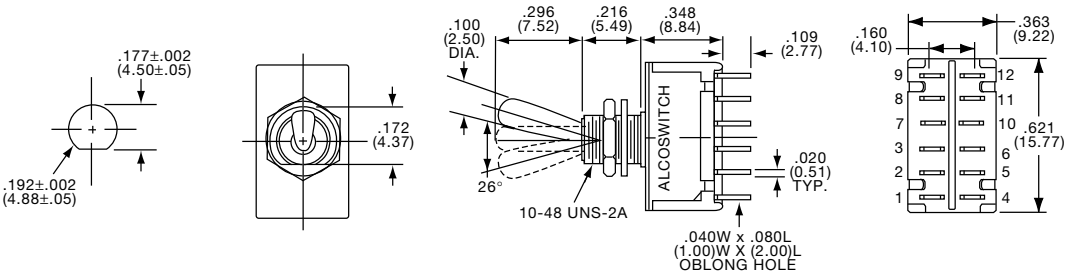
NOTICE: Wire lug terminals accept two No. 20 AWG wires.

For terminal connections refer to Code Chart on page M5-6

1 & 2 POLE



TT13D2T



TT23N2T

4 POLE

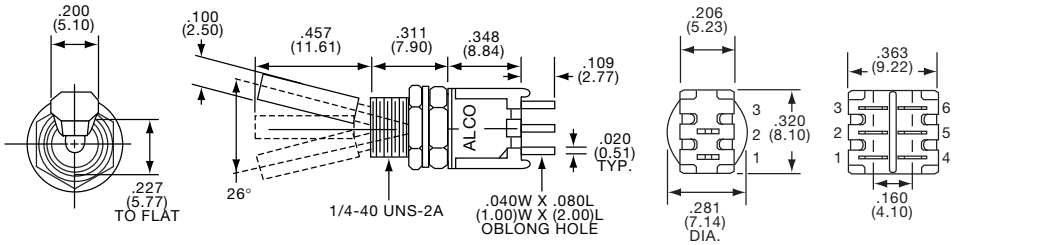
TT43N2T

Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	↘	⊥	↙
7-1437561-8	TT13A2T	SPST	A	On	None	Off
8-1437561-5	TT13D2T	SPDT	D	On	None	On
9-1437561-5	TT13E2T	SPDT	E	On	Off	On
4-1437562-7	TT23K2T	DPST	K	On	None	Off

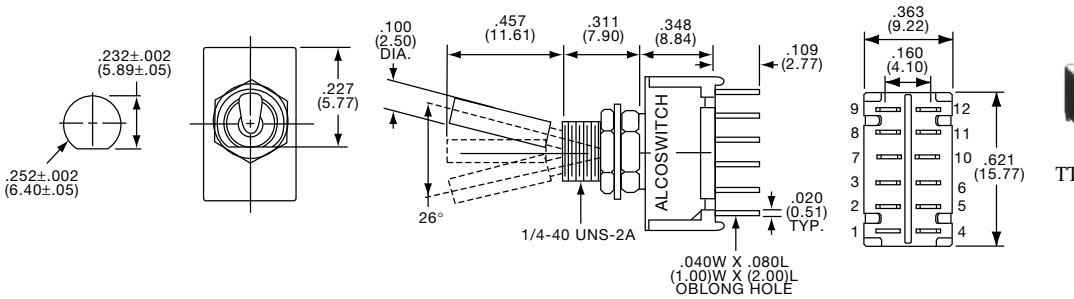
Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	↘	⊥	↙
5-1437562-1	TT23N2T	DPDT	N	On	None	On
5-1437562-7	TT23P2T	DPDT	P	On	Off	On
7-1437562-6	TT43N2T	4PDT	N	On	None	On

Note: No center terminal "A" or "K" action switches.

1 & 2 POLE



TT13D7T1/4



TT23N7T1/4

4 POLE

TT43N7T1/4

Pinned for Anti-Rotation

Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	↘	⊥	↙
9-1437561-1	TT13D7T1/4	SPDT	D	On	None	On
9-1437561-7	TT13E7T1/4	SPDT	E	On	Off	On
5-1437562-5	TT23N7T1/4	DPST	N	On	None	On

Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	↘	⊥	↙
6-1437562-0	TT23P7T1/4	DPDT	P	On	Off	On
7-1437562-8	TT43N7T1/4	4PDT	N	On	None	On
	TT43P7T1/4	4PDT	P	On	Off	On

Catalog 1308390
Issued 9-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in parentheses or brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Toggle Switches, Tiny, Wire Lug, Long Actuators

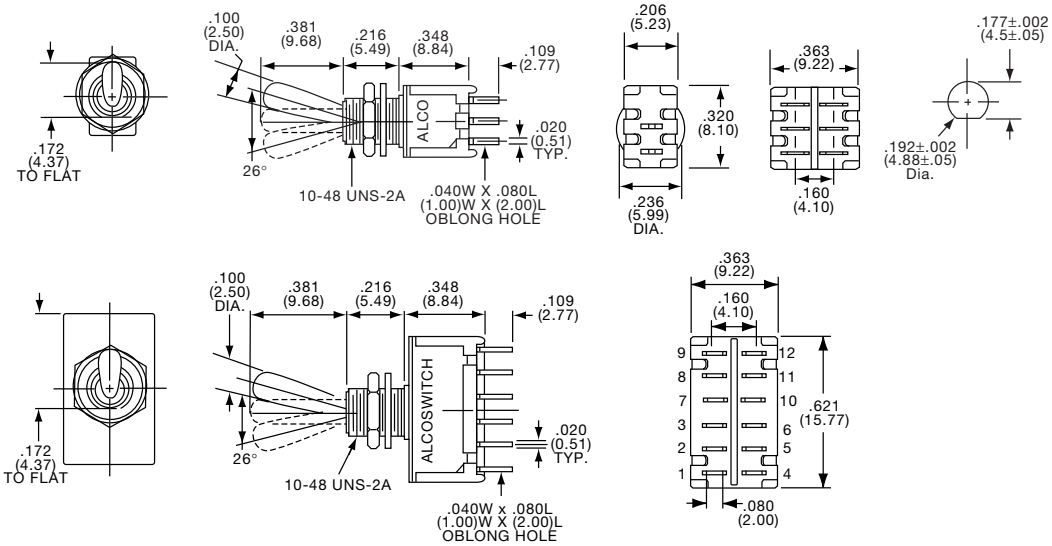
SEE PAGE C8 FOR PRODUCT SPECIFICATIONS

For terminal connections refer to Code Chart on page M5-6

1 & 2 POLE

TT13D3T

TT23N3T



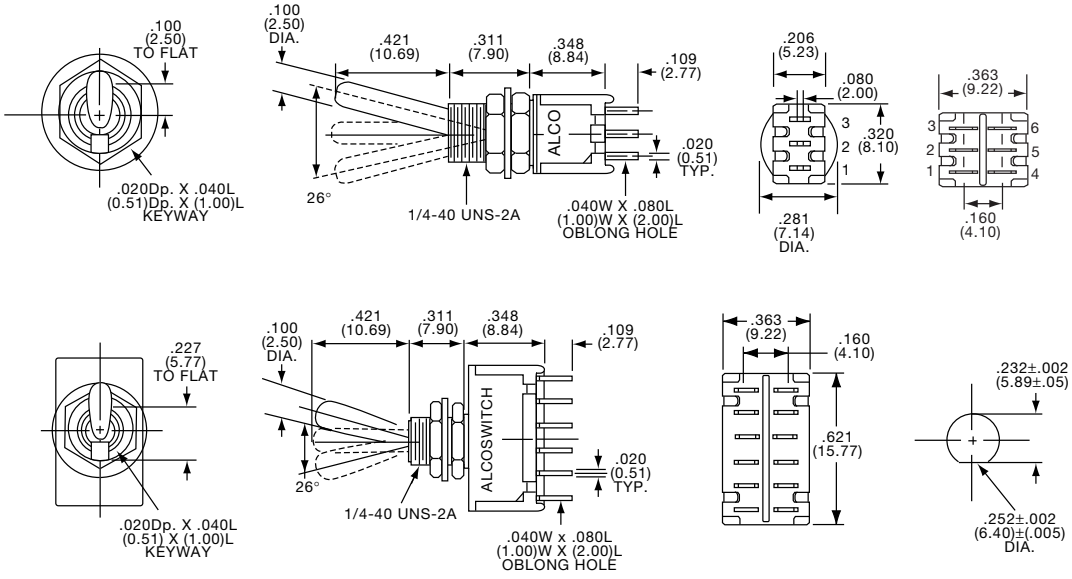
Tyco Electronics	Alcoswitch	Type	Act. Code P. M5				Tyco Electronics	Alcoswitch	Type	Act. Code P. M5			
8-1437561-0	TT13A3T	SPST	A	On	None	Off	5-1437562-8	TT23P3T	DPDT	P	On	Off	On
8-1437561-8	TT13D3T	SPDT	D	On	None	On	7-1437562-7	TT43N3T	4PDT	N	On	None	On
9-1437561-6	TT13E3T	SPDT	E	On	Off	On	8-1437562-0	TT43P3T	4PDT	P	On	Off	On
4-1437562-8	TT23K3T	DPST	K	On	None	Off							
5-1437562-2	TT23N3T	DPDT	N	On	None	On							

Note: No center terminal on "A" or "K" action switches.

1 & 2 POLE

TT13A9T1/4

TT23N9T1/4



4 POLE

TT43N9T1/4

Tyco Electronics	Alcoswitch	Type	Act. Code P. M5				Tyco Electronics	Alcoswitch	Type	Act. Code P. M5			
8-1437561-4	TT13A9T1/4	SPST	A	On	None	Off	6-1437562-2	TT23P9T1/4	DPDT	P	On	Off	On
9-1437561-2	TT13D9T1/4	SPDT	D	On	None	On	7-1437562-9	TT43N9T1/4	4PDT	N	On	None	On
9-1437561-8	TT13E9T1/4	SPDT	E	On	Off	On	8-1437562-1	TT43P9T1/4	4PDT	P	On	Off	On
4-1437562-9	TT23K9T1/4	DPST	K	On	None	Off							
5-1437562-6	TT23N9T1/4	DPDT	N	On	None	On							

Note: No center terminal on "A" or "K" action switches.

Catalog 1308390
Issued 9-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in parentheses or brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Toggle Switches, Process Sealed, Vertical

MATERIAL SPECIFICATIONS:

Contacts .....Gold over nickel
Inner Case Material .....High temperature polyester
Outer Case Material .....Polyamide
Terminals/Fixed Contacts .....Tin lead plate
Terminal Seal .....Epoxy
Process Seal .....Disposable boot, epoxied double case

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature .....-22°F to +185°F (-30°C to +85°C)
Storage Temperature .....-67°F to +185°F (-55°C to +85°C)
Solder Heat Resistance.....See page M3-4

TYPICAL PERFORMANCE CHARACTERISTICS:

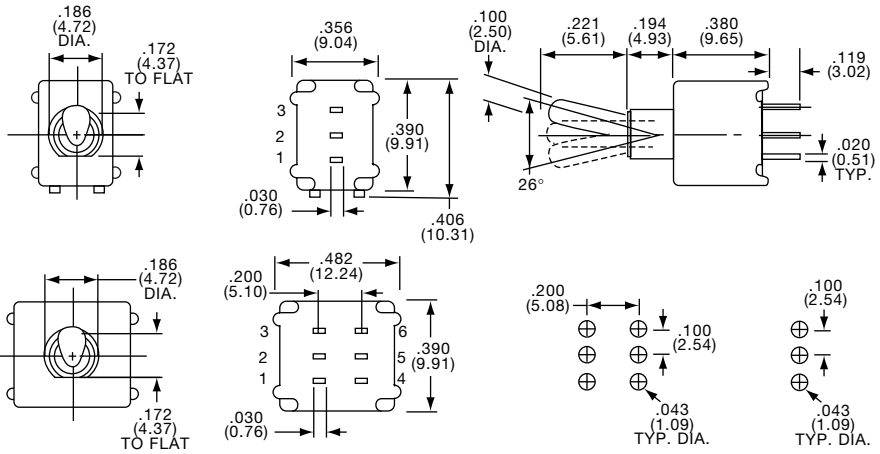
Contact Rating .....0.4VA Max. @ 20 VDC or peak AC
Initial Contact Resistance.....20 Milliohms max.
Contact Timing.....Break-before-make
Insulation Resistance .....1,000 Megohms min. 500 VDC
Dielectric Strength .....1,000 Volts RMS @ sea level
Plunger/Actuator Travel.....26°
Life Expectancy .....See page C8

APPLICATION NOTE: Each switch is provided with a disposable boot used only during cleaning operation.

*** Refer to Page C8 for Other Options ***

Note: Hardware included with switch

1 & 2 POLE UNTHREADED BUSHING

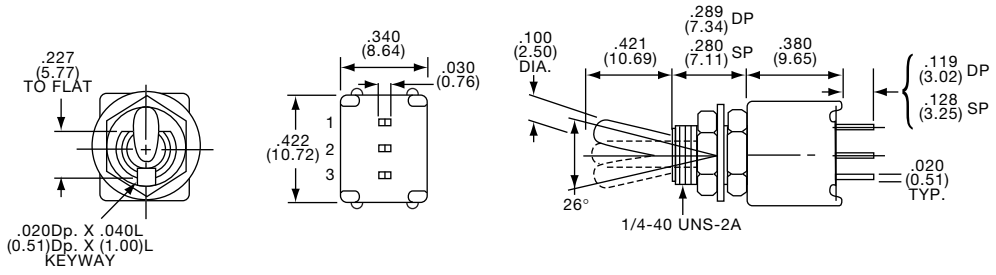


TT11DGPC1ES

Tyco Electronics	Alcoswitch	Type	Act. Code P. M5			
2-1437561-4	TT11AGPC1ES	SPST	A	On	None	Off
2-1437561-7	TT11DGPC1ES	SPDT	D	On	None	On
	Note: No center terminal "A".					

Tyco Electronics	Alcoswitch	Type	Act. Code P. M5			
1437562-4	TT21NGPC1ES	DPDT	N	On	None	On

1 & 2 POLE THREADED BUSHING



TT11DGPC9T1/4ES

TT21NGPC9T1/4ES

Tyco Electronics	Alcoswitch	Type	Act. Code P. M5			
	TT11AGPC9T1/4ES	SPST	A	On	None	Off
6-1437830-2	TT11DGPC9T1/4ES	SPDT	D	On	None	On
	TT11EGPC9T1/4ES	SPDT	E	On	Off	(On)
	TT21KGPC9T1/4ES	DPST	K	On	None	Off
	Note: No center terminal "A" or "K" action switches.					

Tyco Electronics	Alcoswitch	Type	Act. Code P. M5			
1-1437562-2	TT21NGPC9T1/4ES	DPDT	N	On	None	On
	TT21PGPC9T1/4ES	DPDT	P	On	Off	On
	(On) indicates momentary position.					

Catalog 1308390
Issued 9-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in parentheses or brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

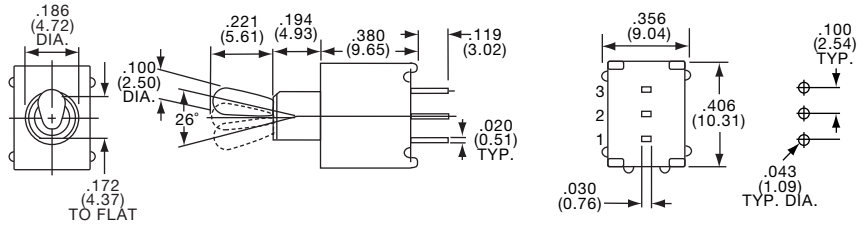
South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Toggle Switches, Tiny, Enviromental and Process Sealed

SEE PAGE C16 FOR PRODUCT SPECIFICATIONS

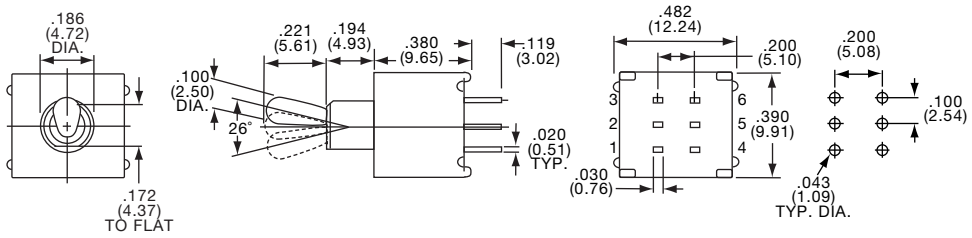
For terminal connections refer to Code Chart on page M5-6

1 POLE-PC VERTICAL MOUNT



Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	↘ ⊥ ↙
8-1437562-6	TTE11DGPC1ES	SPDT	D	On None On
	TTE11EGPC1ES	SPDT	E	On Off On

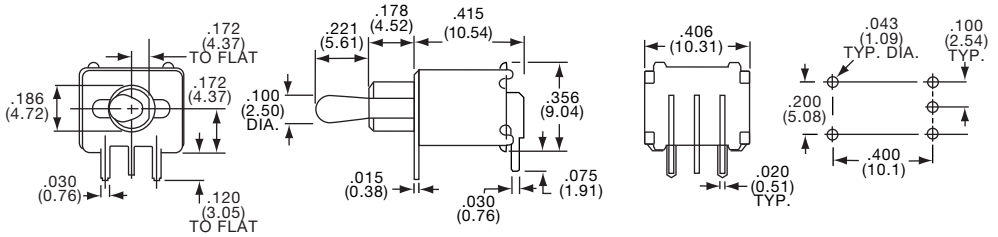
2 POLE-PC VERTICAL MOUNT



Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	↘ ⊥ ↙
1437563-1	TTE21NGPC1ES	DPDT	N	On None On
	TTE21PGPC1ES	DPDT	P	On Off On

1 POLE-PC RIGHT ANGLE

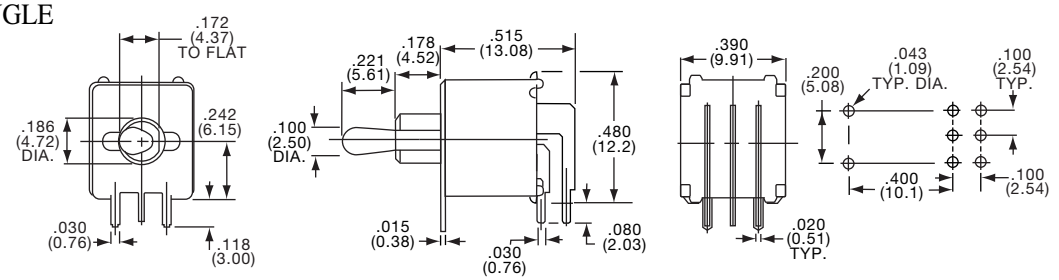
TTE11DGRA1ES
Horizontal Actuation



Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	↘ ⊥ ↙
8-1437562-9	TTE11DGRA1ES	SPDT	D	On None On
9-1437562-2	TTE11EGRA1ES	SPDT	E	On Off On

2 POLE-PC RIGHT ANGLE

TTE21NGRA1ES
Horizontal Actuation



Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	↘ ⊥ ↙
1437563-4	TTE21NGRA1ES	DPDT	N	On None On
	TTE21PGRA1ES	DPDT	P	On Off On

Catalog 1308390
Issued 9-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in parentheses or brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

C

TTE-ES Series

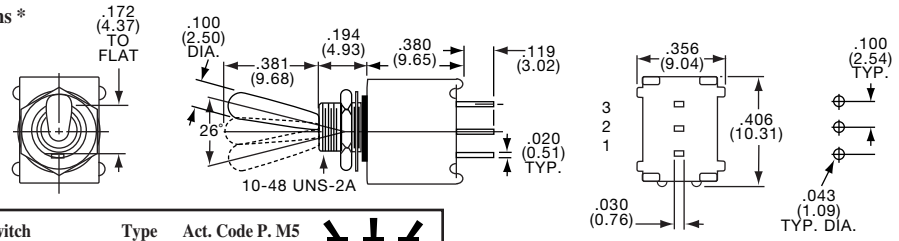
Toggle Switches, Tiny, Enviromental and Process Sealed

For terminal connections refer to Code Chart on page M5-6.

SEE PAGE C16 FOR PRODUCT SPECIFICATIONS

*** Refer to Page C8 for Other Options ***

1 POLE

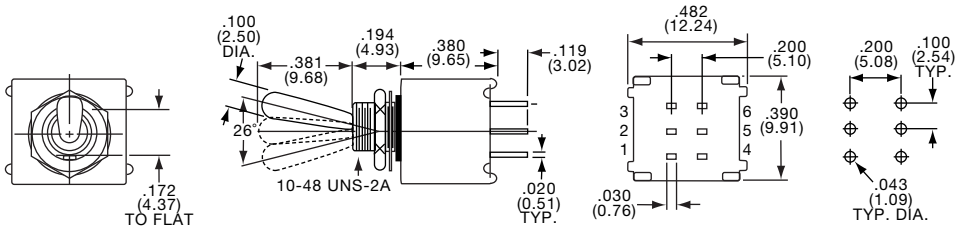


TTE11DGPC3TES

Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	↘ ⊥ ↙
8-1437562-5	TTE11AGPC3TES	SPST	A	On None Off
8-1437562-7	TTE11DGPC3TES	SPDT	D	On None On
9-1437562-0	TTE11EGPC3TES	SPDT	E	On Off On

Note: No center terminal on "A" action switches.

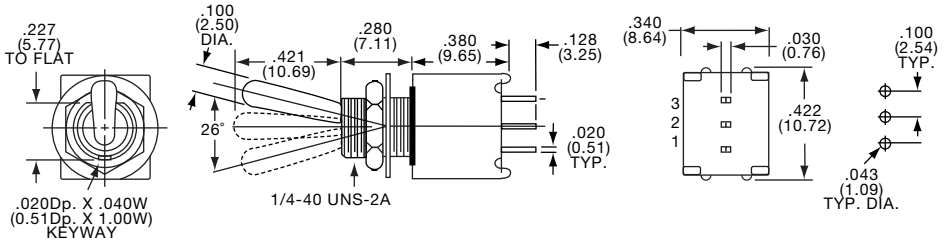
2 POLE



TTE21NGPC3TES

Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	↘ ⊥ ↙
1437563-2	TTE21NGPC3TES	DPDT	N	On None On
	TTE21PGPC3TES	DPDT	P	On Off On

1 POLE

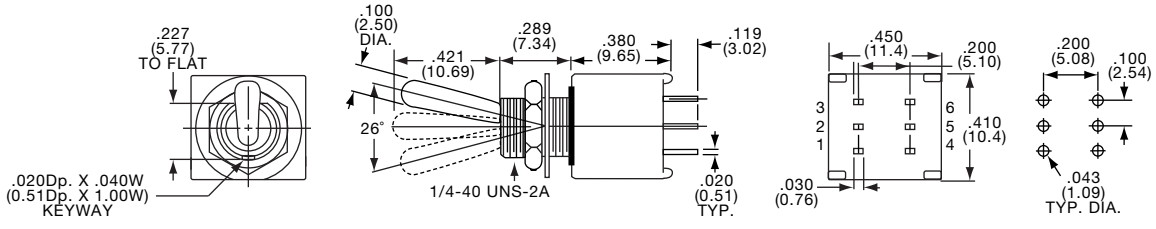


TTE11DGPC9T4ES

Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	↘ ⊥ ↙
	TTE11AGPC9T1/4ES	SPST	A	On None Off
8-1437562-8	TTE11DGPC9T1/4ES	SPDT	D	On None On
9-1437562-1	TTE11EGPC9T1/4ES	SPDT	E	On Off On

Note: No center terminal on "A" action switches.

2 POLE



TTE21NGPC9T4ES

Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	↘ ⊥ ↙
	TTE21KGPC9T1/4ES	DPST	K	On None Off
1437563-3	TTE21NGPC9T1/4ES	DPDT	N	On None On
	TTE21PGPC9T1/4ES	DPDT	P	On Off On

Note: No center terminal on "K" action switches.

Catalog 1308390
Issued 9-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in parentheses or brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001
Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:
moschip.ru
moschip.ru_4
moschip.ru_6
moschip.ru_9