

2

Toggle Switches

2.1 Miniature Toggle Switches



General		8– 9
Series STM	with short lever	10–11
Series MTA		12–13
Series MTE	waterproof	14–15
Series MTL	with locking lever	16–17
Series MTG	mustang type	18–19
Series MTW	mustang type/waterproof	20
Series MZME	ESD proof	21

2.2 Subminiature Toggle Switches



Series ATE		22–24
Series SST	SMD	25
Series TST	low-cost/ESD proof	26–27

2.3 Microminiature Toggle Switches



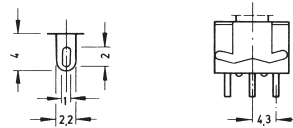
Series FT	ESD proof	28–29
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Miniature Toggle Switches

Available for miniature toggle switches series MT./ST.
and also for miniature pushbutton switches series MP.

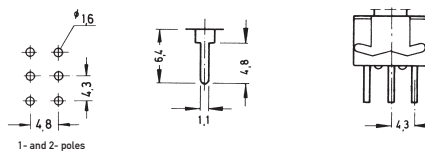
Solder tags:

Series MT./MP.



PC terminals:

- PC



horizontal actuation on PCB*

- RA



vertical actuation on PCB*

- VM



* Series ST./SP. only

Standard switches with RA and VM are without thread. Special versions upon request.

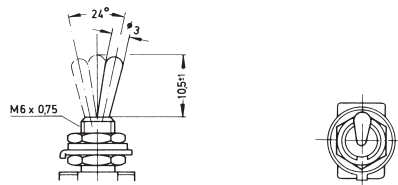
Partly non-stock items; minimum quantity and delivery time on request.

Miniature Toggle Switches

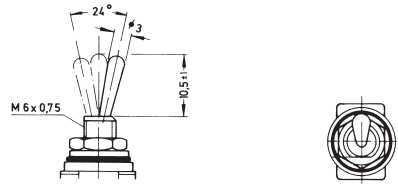
2

Standard levers:

Series MTA

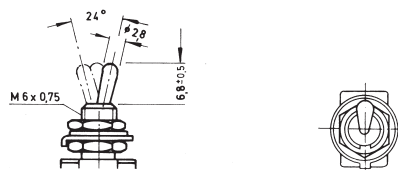


waterproof IP 67
Series MTE

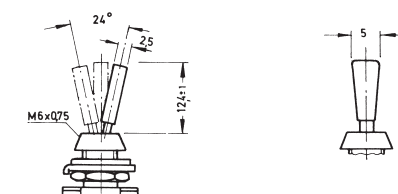


Special levers:

short
Series MTM

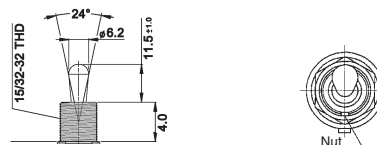


flat, with decorative nut
Series MTF

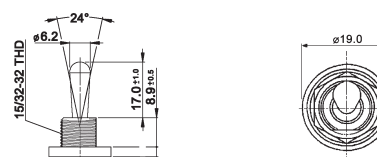


Mustang levers:

Series MTG

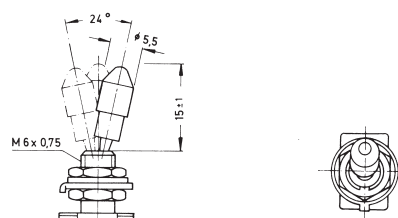


long, waterproof IP 67
Series MTW



Locking lever:

Series MTL



Miniature Toggle Switches for horizontal mounting, without thread



Specifications:

Contact rating:	250 V AC, 3 A / 125 V AC, 6 A 30 V DC, 4 A / 12 V DC, 5 A 6 V DC, 6 A
Contact resistance:	< 10 mΩ
Insulation resistance:	> 1000 MΩ at 500 V DC
Dielectric strength:	1500 V, 50 Hz for the duration of 1 minute
Operating temperature:	– 20° to + 80° C
Mechanical life:	minimum 100 000 operations
Contacts:	coin silver (common contact copper alloy, silver-plated)
Terminals:	PC terminals, copper alloy silver-plated
Material:	case: diallyle-phthalate, meets UL 94 V–0, green lever: chromium-plated, metal parts: nickel-plated
Mounting:	on pc-board, horizontal mounting
Soldering conditions:	auto-soldering – max.: 5 sec, 270° C

Models:

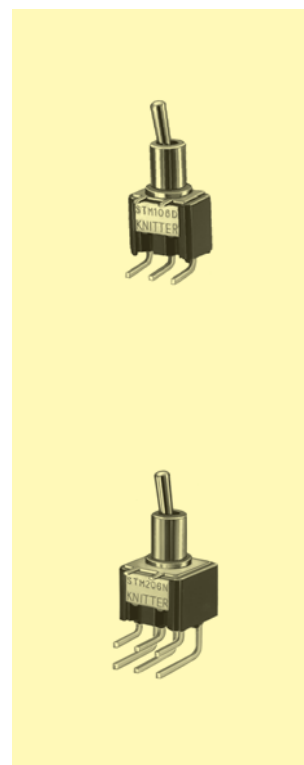
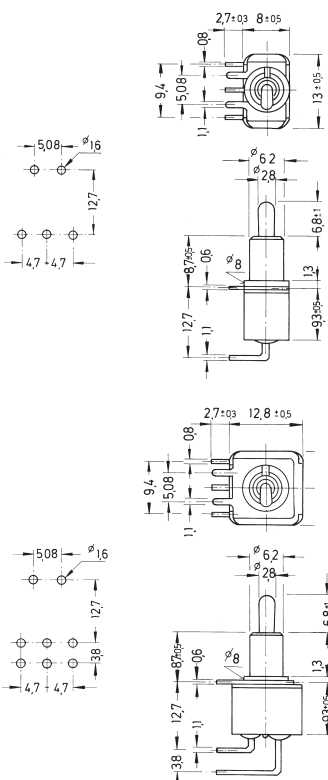
Switching functions

S P D T

STM 106 D – RA	on	–	on
STM 106 E – RA	on	off	on
STM 106 F – RA	mom	–	on
STM 106 G – RA	mom	off	mom
STM 106 H – RA	mom	off	on

D P D T

STM 206 N – RA	on	–	on
STM 206 P – RA	on	off	on
STM 206 R – RA	mom	–	on
STM 206 S – RA	mom	off	mom
STM 206 T – RA	mom	off	on





Contact rating:	250 V AC, 3 A / 125 V AC, 6 A 30 V DC, 4 A / 12 V DC, 5 A 6 V DC, 6 A
Contact resistance:	< 10 mΩ
Insulation resistance:	> 1000 MΩ at 500 V DC
Dielectric strength:	1500 V, 50 Hz for the duration of 1 minute
Operating temperature:	– 20° to + 80° C
Mechanical life:	minimum 100 000 operations
Contacts:	coin silver (common contact copper alloy, silver-plated)
Terminals:	PC terminals, copper alloy silver-plated
Material:	case: diallyle-phthalate, meets UL 94 V–0, green lever: chromium-plated, metal parts: nickel-plated
Mounting:	on pc-board, vertical mounting
Soldering conditions:	auto-soldering – max.: 5 sec, 270° C

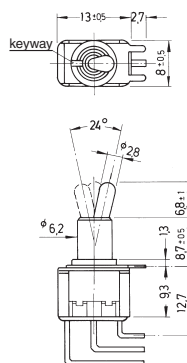
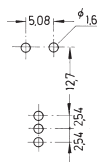
2

Switching functions

●

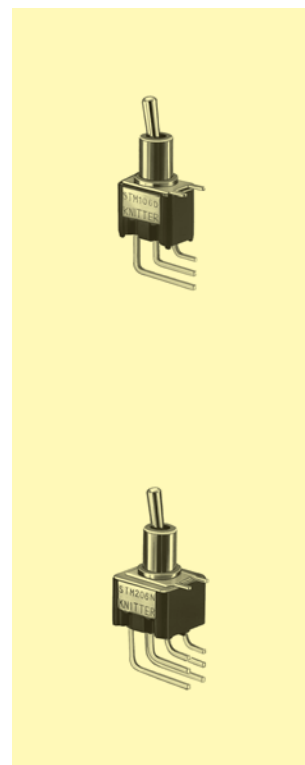
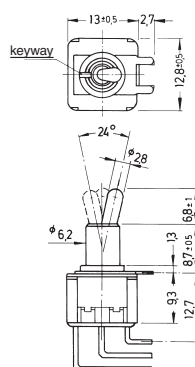
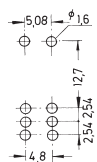
STM 106 D – VM
STM 106 E – VM
STM 106 F – VM
STM 106 G – VM
STM 106 H – VM

on - on
on off on
mom - on
mom off mom
mom off on



STM 206 N – VM
STM 206 P – VM
STM 206 R – VM
STM 206 S – VM
STM 206 T – VM

on - on
on off on
mom - on
mom off mom
mom off on



Miniature Toggle Switches



Specifications:

Contact rating:	250 V AC, 3 A / 125 V AC, 6 A 30 V DC, 4 A / 12 V DC, 5 A 6 V DC, 6 A
Contact resistance:	< 10 mΩ
Insulation resistance:	> 1000 MΩ at 500 V DC
Dielectric strength:	1500 V, 50 Hz for the duration of 1 minute
Operating temperature:	– 45° to + 140° C
Mechanical life:	minimum 300 000 operations
Contacts:	coin silver (common contact copper alloy, silver-plated) also available gold-plated, version B and G (see page 4)
Terminals:	solder tags, copper alloy silver-plated further terminal versions see page 8
Material:	case: diallyle-phthalate, meets UL 94 V–0, black lever: chromium-plated, metal parts: nickel-plated
Mounting:	bushing M 6 x 0,75 with locking plate, key 9 mm
Soldering conditions:	hand-soldering – max.: 60 W, 3 sec, 420° C auto-soldering – max.: 5 sec, 270° C

Accessories:

Knurled nut, nickel-plated
M 6 x 0,75, Ø 8 mm R 675



Plastic caps (height 11,5 mm)

orange	C 1103
blue	C 1104
black	C 1105
green	C 1106
grey	C 1107
yellow	C 1108
red	C 1109
white	C 1110



Waterproof sealing caps (height 14,3 mm)

black ET 102

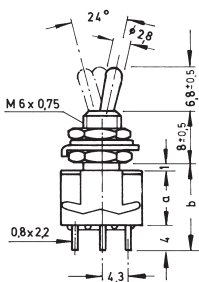


Waterproof sealing cap with mounting screw

Special levers:

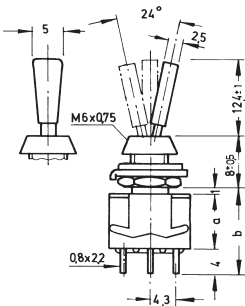
Miniature toggle switches
with short lever

Series MTM



Miniature toggle switches
with flat lever and
special decorative nut

Series MTF





Miniature Toggle Switches

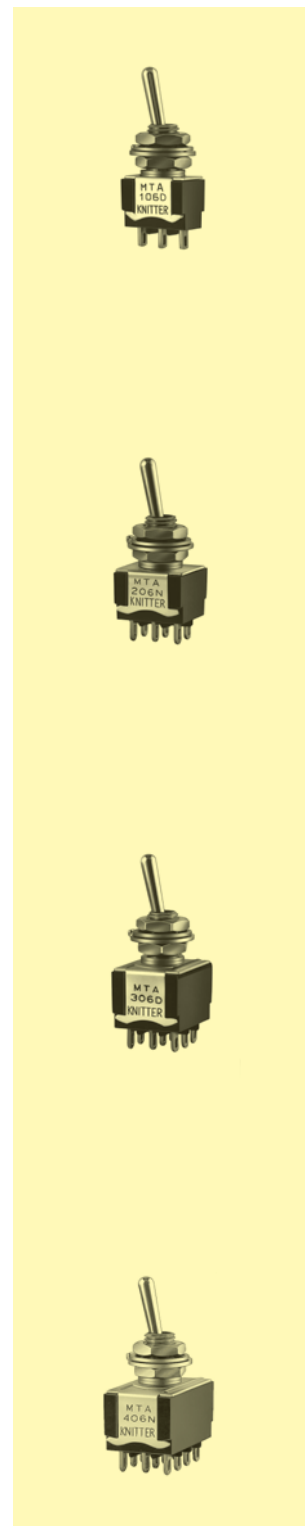
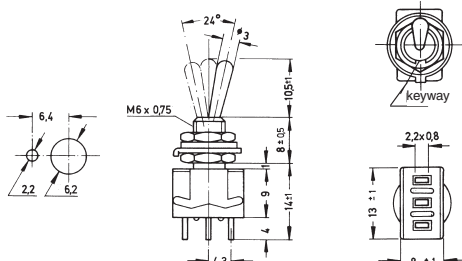
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Models: Switching functions

SPDT



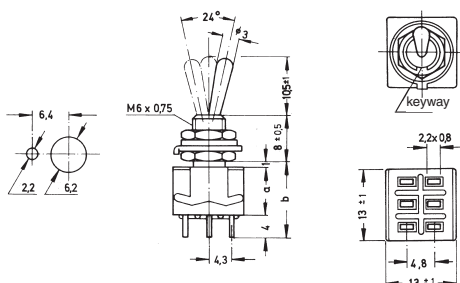
MTA 106 D	on	—	on
MTA 106 E	on	off	on
MTA 106 F	mom	—	on
MTA 106 G	mom	off	mom
MTA 106 H	mom	off	on



DPDT

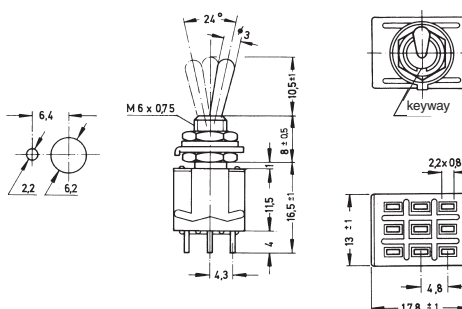
MTA 206 N	on	—	on
MTA 206 P	on	off	on
MTA 206 R	mom	—	on
MTA 206 S	mom	off	mom
MTA 206 T	mom	off	on
MTA 206 PA	on	on	on
MTA 206 SA	mom	on	mom
MTA 206 TA	mom	on	on

measures: a = 9, b = 14 ± 1



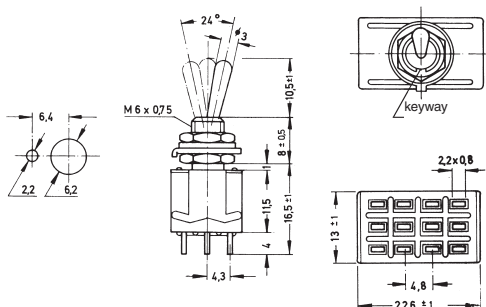
3PDT

MTA 306 D	on	—	on
MTA 306 E	on	off	on
MTA 306 F	mom	—	on
MTA 306 G	mom	off	mom
MTA 306 H	mom	off	on
MTA 306 EA*	on	on	on



4PDT

MTA 406 N	on	—	on
MTA 406 P	on	off	on
MTA 406 R	mom	—	on
MTA 406 S	mom	off	mom
MTA 406 T	mom	off	on
MTA 406 PA	on	on	on
MTA 406 SA	mom	on	mom
MTA 406 TA	mom	on	on



* Non-stock item; minimum quantity and delivery time on request.



Specifications:

Contact rating:	250 V AC, 3 A / 125 V AC, 6 A 30 V DC, 4 A / 12 V DC, 5 A 6 V DC, 6 A
Contact resistance:	< 10 mΩ
Insulation resistance:	> 1000 MΩ at 500 V DC
Dielectric strength:	1500 V, 50 Hz for the duration of 1 minute
Operating temperature:	– 45° to + 140° C
Mechanical life:	minimum 100 000 operations
Contacts:	coin silver (common contact copper alloy, silver-plated) also available gold-plated, version B and G (see page 4)
Terminals:	solder tags, copper alloy silver-plated further terminal versions see page 8
Water proofing:	30 minutes at 1 m water column; IP 67
Sealing:	neoprene O-rings between toggle/bushing and bushing/panel
Material:	case: diallyle-phthalate, meets UL 94 V–0, black lever: chromium-plated, metal parts: nickel-plated
Mounting:	bushing M 6 x 0,75 locking through flat bush, key 9 mm
Soldering conditions:	hand-soldering – max.: 60 W, 3 sec, 420° C auto-soldering – max.: 5 sec, 270° C

Accessories:

Plastic caps (height 11,5 mm)

orange	C 1103
blue	C 1104
black	C 1105
green	C 1106
grey	C 1107
yellow	C 1108
red	C 1109
white	C 1110



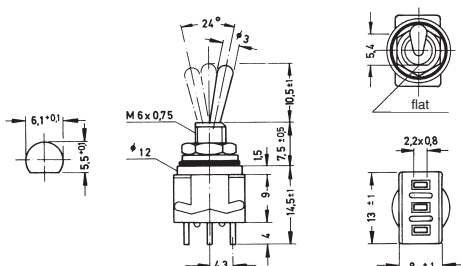


Miniature Toggle Switches waterproof

Models: Switching functions

SPDT

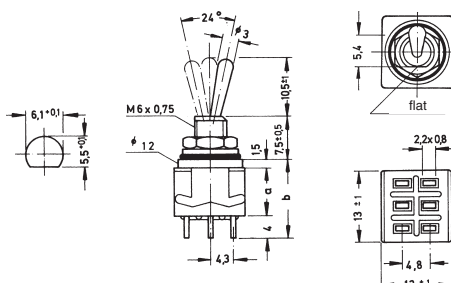
MTE 106 D	on	—	on
MTE 106 E	on	off	on
MTE 106 F	mom	—	on
MTE 106 G	mom	off	mom
MTE 106 H*	mom	off	on



DPDT

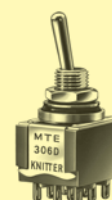
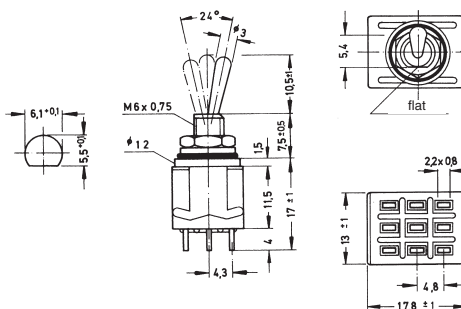
MTE 206 N	on	—	on
MTE 206 P	on	off	on
MTE 206 R	mom	—	on
MTE 206 S	mom	off	mom
MTE 206 T	mom	off	on
MTE 206 PA	on	on	on
MTE 206 SA*	mom	on	mom
MTE 206 TA*	mom	on	on

measures: a = 9, b = 14,5±1



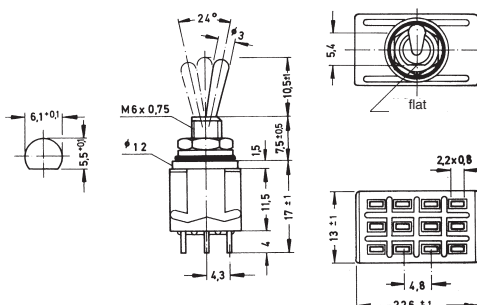
3PDT

MTE 306 D	on	—	on
MTE 306 E	on	off	on
MTE 306 F*	mom	—	on
MTE 306 G*	mom	off	mom
MTE 306 H*	mom	off	on



4PDT

MTE 406 N	on	—	on
MTE 406 P	on	off	on
MTE 406 R*	mom	—	on
MTE 406 S*	mom	off	mom
MTE 406 T*	mom	off	on
MTE 406 PA*	on	on	on
MTE 406 SA*	mom	on	mom
MTE 406 TA*	mom	on	on



* Non-stock item; minimum quantity and delivery time on request.

Miniature Toggle Switches with locking lever



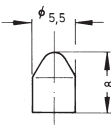
Specifications:

Contact rating:	250 V AC, 3 A / 125 V AC, 6 A 30 V DC, 4 A / 12 V DC, 5 A 6 V DC, 6 A
Contact resistance:	< 10 mΩ
Insulation resistance:	> 1000 MΩ at 500 V DC
Dielectric strength:	1500 V, 50 Hz for the duration of 1 minute
Operating temperature:	– 45° to + 140° C
Mechanical life:	minimum 300 000 operations
Contacts:	coin silver (common contact copper alloy, silver-plated) also available gold-plated, version B and G (see page 4)
Terminals:	solder tags, copper alloy silver-plated
Material:	case: diallyle-phthalate, meets UL 94 V–0, black lever: chromium-plated, metal parts: nickel-plated
Mounting:	bushing M 6 x 0,75, with locking plate, key 9 mm, tightening torque 49 Ncm max.
Soldering conditions:	hand-soldering – max.: 60 W, 3 sec, 420° C auto-soldering – max.: 5 sec, 270° C

Accessories:

Standard version: lever and cap anodized aluminium.
On request, caps are available in the following colours:

blue	KL 104
black	KL 105
red	KL 109
silver	KL 110





Miniature Toggle Switches with locking lever

Models

Switching functions

SPDT

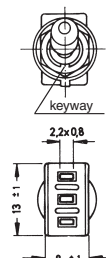
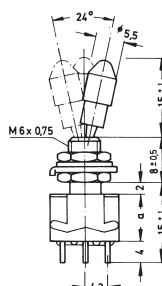


MTL 106 D

on — on

MTL 106 E

on off on



DPDT

MTL 206 N

on — on

MTL 206 P

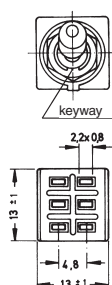
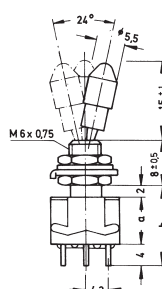
on off on

measures: a = 9, b = 15 ± 1

MTL 206 PA

on on on

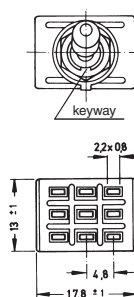
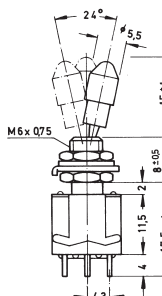
measures: a = 11.5, b = 17.5 ± 1



3PDT

MTL 306 D

on — on



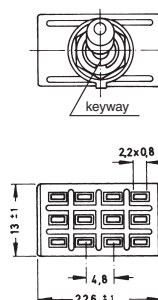
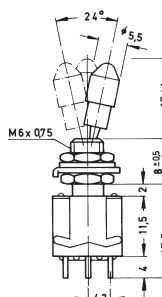
4PDT

MTL 406 N

on — on

MTL 406 P*

on off on



* Non-stock item; minimum quantity and delivery time on request.

Mustang Toggle Switches

Specifications:

Contact rating:	250 V AC, 3 A / 125 V AC, 6 A 30 V DC, 4 A / 12 V DC, 5 A 6 V DC, 6 A
Contact resistance:	< 20 mΩ
Insulation resistance:	> 1000 MΩ at 500 V DC
Dielectric strength:	1500 V, 50 Hz for the duration of 1 minute
Operating temperature:	– 45° to + 140° C
Mechanical life:	minimum 200 000 operations (100 000 cycles for SA and TA)
Contacts:	coin silver (common contact copper alloy, silver-plated) also available gold-plated version B and G (see page 4)
Terminals:	solder tags, copper alloy silver-plated further terminal versions see page 8
Material:	case: diallyl-phthalate, meets UL 94 V–0, green lever: chromium-plated, metal parts: nickel-plated
Mounting:	bushing 15/32-32 THD with locking plate (M 12 x 0,75), key 14 mm
Soldering conditions:	hand-soldering – max.: 60 W, 3 sec, 420° C auto-soldering – max.: 5 sec, 270° C

Accessories:

Plastic caps (height 12,7 mm)

orange	C 2103
blue	C 2104
black	C 2105
green	C 2106
grey	C 2107
yellow	C 2108
red	C 2109
white	C 2110



Waterproof sealing cap (height 21,4 mm)

light grey transparent ET 307 Z



Waterproof sealing cap (height 11 mm)

grey ET 507 Z



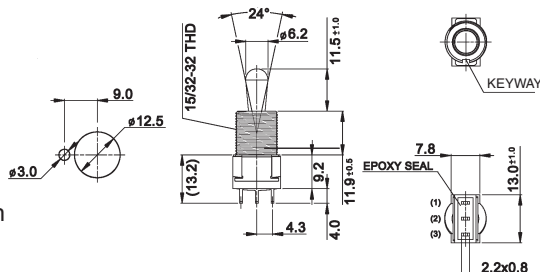


Mustang Toggle Switches

Models: Switching functions

S P D T

MTG 106 D	on	—	on
MTG 106 E	on	off	on
MTG 106 F	mom	—	on
MTG 106 G	mom	off	mom
MTG 106 H	mom	off	on



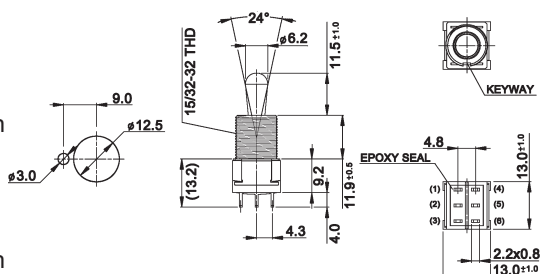
D P D T

MTG 206 N	on	—	on
MTG 206 P	on	off	on
MTG 206 R	mom	—	on
MTG 206 S	mom	off	mom
MTG 206 T	mom	off	on

measures: a = 9, b = 13 ± 1

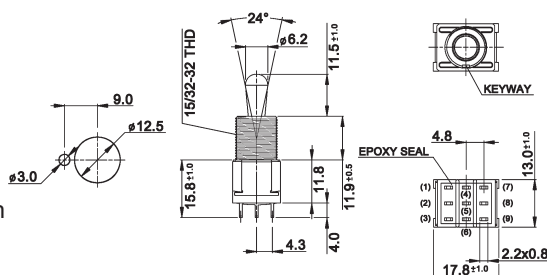
MTG 206 PA*	on	on	on
MTG 206 SA*	mom	on	mom
MTG 206 TA*	mom	on	on

measures: a = 11,5, b = 15,5 ± 1



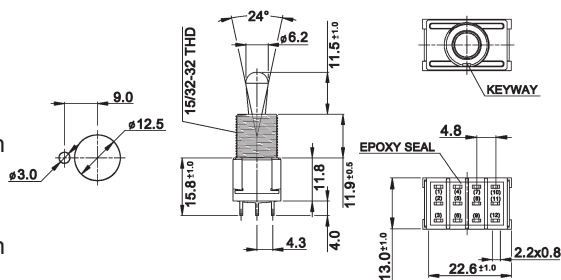
3 P D T

MTG 306 D	on	—	on
MTG 306 E*	on	off	on
MTG 306 F*	mom	—	on
MTG 306 G*	mom	off	mom
MTG 306 H*	mom	off	on



4 P D T

MTG 406 N	on	—	on
MTG 406 P*	on	off	on
MTG 406 R*	mom	—	on
MTG 406 S*	mom	off	mom
MTG 406 T*	mom	off	on
MTG 406 PA*	on	on	on
MTG 406 SA*	mom	on	mom
MTG 406 TA*	mom	on	on



* Non-stock item; minimum quantity and delivery time on request.

Mustang Toggle Switches waterproof



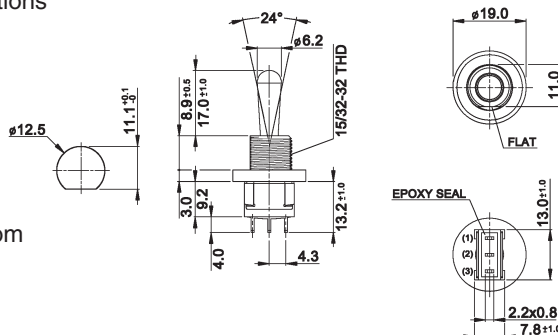
Specifications:

Contact rating:	250 V AC, 3 A / 125 V AC, 6 A 30 V DC, 4 A / 12 V DC, 5 A 6 V DC, 6 A
Contact resistance:	< 20 mΩ
Insulation resistance:	> 1000 MΩ at 500 V DC
Dielectric strength:	1500 V, 50 Hz for the duration of 1 minute
Operating temperature:	– 45° to + 140° C
Mechanical life:	minimum 100 000 operations
Contacts:	coin silver (common contact copper alloy, silver-plated) also available gold-plated version B and G (see page 4)
Terminals:	solder tags, copper alloy silver-plated
Water proofing:	IP 67
Sealing:	neoprene O-rings between toggle/bushing and bushing/panel
Material:	case: diallyle-phthalate, meets UL 94 V–0, green lever: chromium-plated, metal parts: nickel-plated
Mounting:	bushing 15/32-32 THD locking through flat bush, key 14 mm
Soldering conditions:	hand-soldering – max.: 60 W, 3 sec, 420° C auto-soldering – max.: 5 sec, 270° C

Models: Switching functions

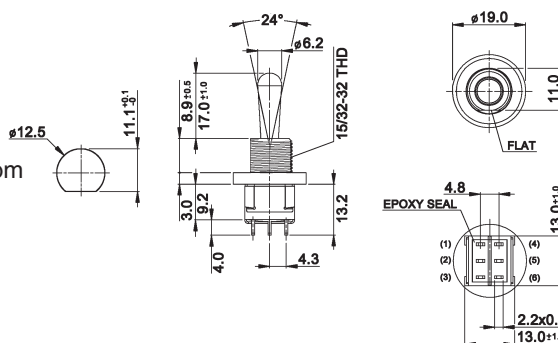
SPDT

MTW 106 D	on	–	on
MTW 106 E	on	off	on
MTW 106 F	mom	–	on
MTW 106 G	mom	off	mom
MTW 106 H	mom	off	on



DPDT

MTW 206 N	on	–	on
MTW 206 P	on	off	on
MTW 206 R	mom	–	on
MTW 206 S	mom	off	mom
MTW 206 T	mom	off	on
MTW 206 PA	on	on	on



Accessories:

Waterproof sealing cap (height 11 mm)	
grey	ET 507 Z





Miniature Toggle Switches ESD proof

2

Specifications:

Contact rating:	20 V AC, 0,4 VA
Contact resistance:	< 10 mΩ
Insulation resistance:	> 1000 MΩ
Dielectric strength:	1000 V, 50 Hz for the duration of 1 minute
Operating temperature:	– 30° to + 85° C
Mechanical life:	minimum 30 000 operations
Contacts:	gold-plated over nickel barrier
Terminals:	solder tags or PC terminals
Material:	case: PA / PES meets UL 94 V–0, waterproof lever: PA meets UL 94 V–0, waterproof
Water proofing:	IP 67
Mounting:	bushing 1/4" (6,35 mm), with locking ring or on pc-board
Soldering conditions:	hand-soldering – max.: 5 sec, 350° C auto-soldering – max.: 10 sec, 260° C
ESD resistance:	> 8 kV (between lever and terminals)

Models:

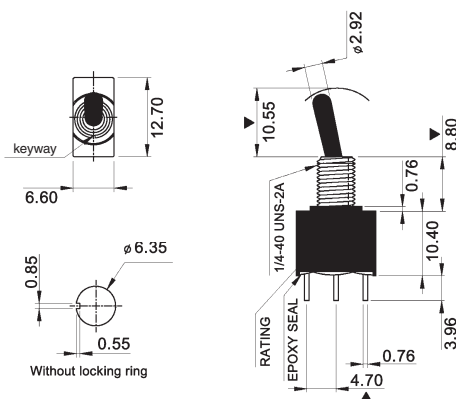
Switching positions: the closed contacts are opposite to the lever position

washable

S P D T

MZME 1 DB-ESD

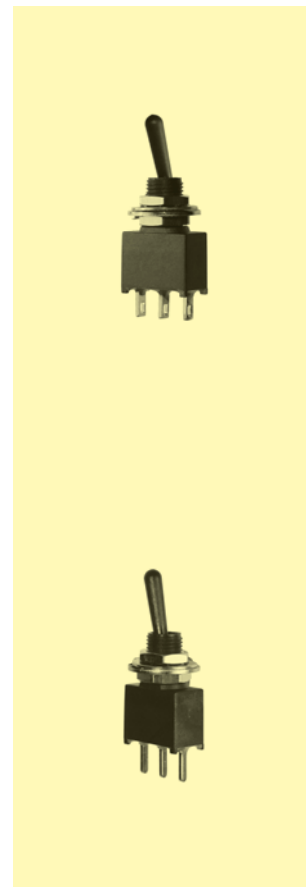
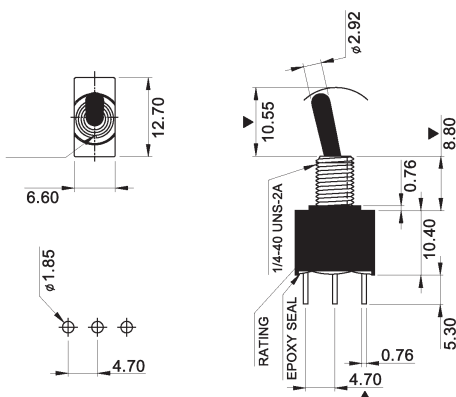
on – on



S P D T

MZME 1 DB-PC-ESD

on – on



Subminiature Toggle Switches

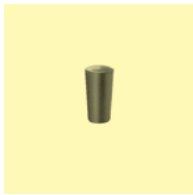
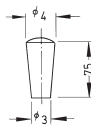


Specifications:

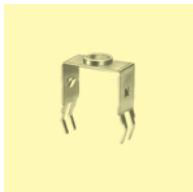
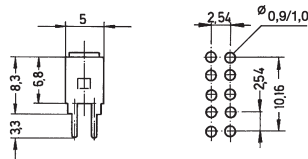
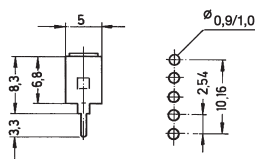
Contact rating:	max. 48 V AC/DC, 0,4 VA / max. 50 mA min. 20 mV AC/DC, 1 μ A
Contact resistance:	< 50 m Ω
Insulation resistance:	> 500 M Ω at 250 V DC
Dielectric strength:	500 V, 50 Hz for the duration of 1 minute
Operating temperature:	- 20° to + 80° C
Mechanical life:	minimum 60 000 operations
Contacts:	phosphor bronze gold-plated over nickel barrier
Terminals:	PC terminals, crimped phosphor bronze gold-plated over nickel barrier
Material:	case: PBT, meets UL 94 V-0, washable metal parts: nickel-plated brass
Mounting:	on pc-board
Soldering conditions:	auto-soldering – max.: 5 sec \pm 1 sec., 260° C \pm 5° C

Accessories:

Plastic caps	Order number
black	C 3105
green	C 3106
grey	C 3107
yellow	C 3108
red	C 3109
white	C 3110



Supporting bracket for	ATE 1.	ATE 2.
Order number	AZ 0001	AZ 0005





Subminiature Toggle Switches

Models:

Switching functions:

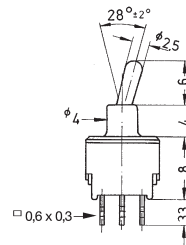
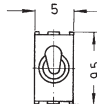
Switching functions F/H/R/T:

the closed contacts are opposite to the lever position;
when looking at the brand name on the right hand side

washable

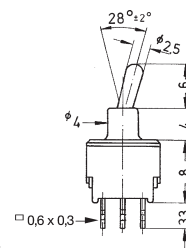
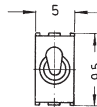
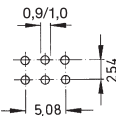
SPDT

ATE 1 D	on	—	on
ATE 1 E	on	off	on
ATE 1 F	mom	—	on
ATE 1 G	mom	off	mom
ATE 1 H	mom	off	on



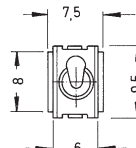
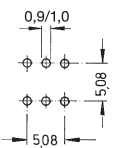
DPDT

ATE 2 D	on	—	on
ATE 2 E	on	off	on
ATE 2 F	mom	—	on
ATE 2 G	mom	off	mom
ATE 2 H	mom	off	on



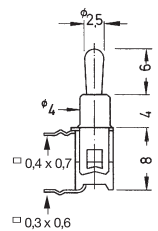
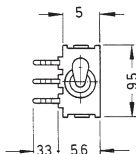
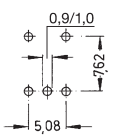
DPDT

ATE 2 N	on	—	on
ATE 2 P*	on	off	on
ATE 2 R*	mom	—	on
ATE 2 S*	mom	off	mom
ATE 2 T*	mom	off	on



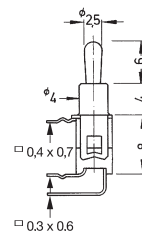
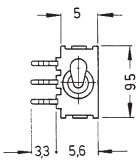
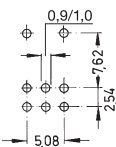
SPDT

ATE 1 D - RA	on	—	on
ATE 1 E - RA	on	off	on
ATE 1 F - RA	mom	—	on
ATE 1 G - RA	mom	off	mom
ATE 1 H - RA	mom	off	on



DPDT

ATE 2 D - RA	on	—	on
ATE 2 E - RA	on	off	on
ATE 2 F - RA	mom	—	on
ATE 2 G - RA	mom	off	mom
ATE 2 H - RA	mom	off	on



Special versions see page 24.

* Non-stock item; minimum quantity and delivery time on request.

Subminiature Toggle Switches waterproof



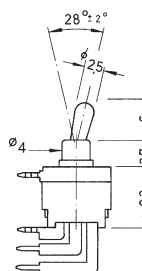
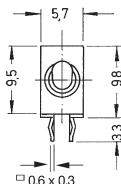
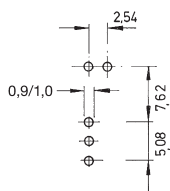
Specifications: see page 22

Models: Switching functions the closed contacts are opposite to the lever position;
Switching functions F/H: when looking at the brand name on the right hand side.

2

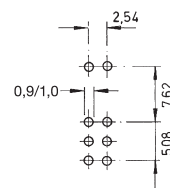
SPDT

ATE 1 D – VM	on	–	on
ATE 1 E – VM	on	off	on
ATE 1 F – VM*	mom	–	on
ATE 1 G – VM*	mom	off	mom
ATE 1 H – VM*	mom	off	on



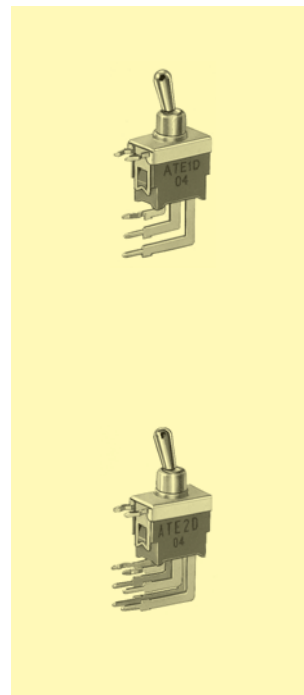
DPDT

ATE 2 D – VM	on	–	on
ATE 2 E – VM	on	off	on
ATE 2 F – VM*	mom	–	on
ATE 2 G – VM*	mom	off	mom
ATE 2 H – VM*	mom	off	on



Accessories: see page 22.

washable

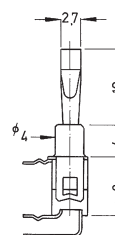
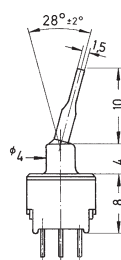


Special versions*:

long flat lever

Additional to type number: F

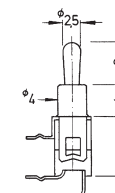
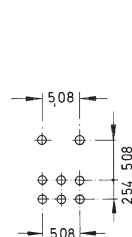
Example of order: ATEF 2D – RA



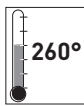
Spacing 5,08 mm

Additional to type number: – 1

Example of order: ATE 2E – RA-1



* Non-stock item; minimum quantity and delivery time on request



Subminiature Toggle Switches for SMT

2

Specifications:

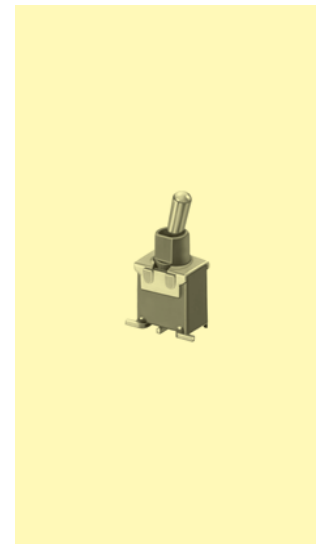
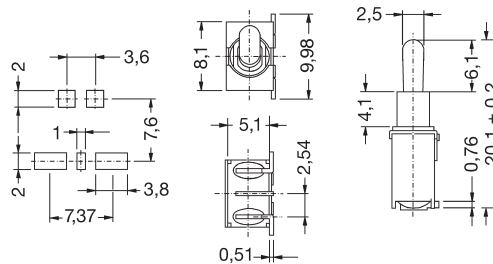
Contact rating:	max. 20 V AC/DC, 0,4 VA
Contact resistance:	< 20 mΩ
Insulation resistance:	> 1000 MΩ
Dielectric strength:	1000 V RMS at sea level
Operating temperature:	– 30° to + 85° C
Electrical life:	50000 operations at full load
Contacts:	copper alloy, with gold plate over nickel plate
Terminals:	copper alloy, with tin plate over nickel plate
Material:	case and bushing: glass filled nylon 6/6 (UL 94 V–0) actuator: brass, chromium-plated switch support: brass, tin-plated base and stem: thermoplastic nylon meets UL 94 V–0; caps ABS
Mounting:	on pc-board – SMD

washable

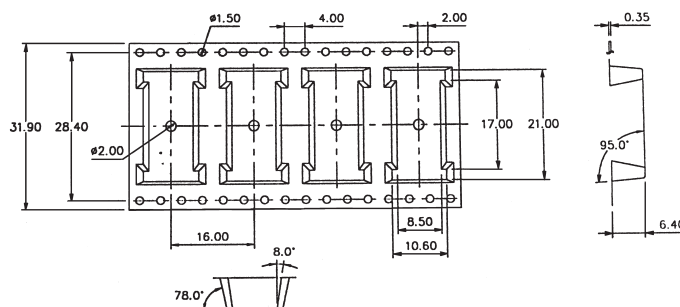
Model: Switching function

SST 1 DT-R

on – on



Packing:
500 pcs/reel



Subminiature Toggle Switches ESD proof



Specifications:

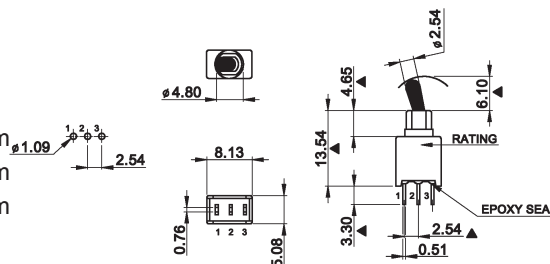
Contact rating:	max. 20 V AC / DC, 0,4 VA
Contact resistance:	< 20 mΩ
Insulation resistance:	> 1000 MΩ
Dielectric strength:	1000 V, 50 Hz for the duration of 1 minute
Operating temperature:	– 30° to + 85° C
Mechanical life:	minimum 50 000 operations
Contacts/Terminals:	copper alloy, gold-plated over nickel
Material:	case: nylon with glass fibre, meets UL 94 V–0, washable support: brass, tin-plated lever: brass, chromium-plated (...-ESD: PA, ESD resistance 6 kV)
Mounting:	on pc-board

Models: Switching functions: the closed contacts are opposite to the lever position.

washable

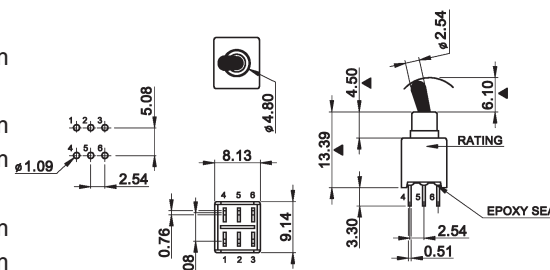
SPDT

TST 1 D (-ESD)	on	–	on
TST 1 E (-ESD)	on	off	on
TST 1 F (-ESD)	on	–	mom
TST 1 G (-ESD)	mom	off	mom
TST 1 H (-ESD)	on	off	mom



DPDT

TST 2 N (-ESD)	on	–	on
TST 2 R (-ESD)	on	–	mom
TST 2 P (-ESD)	on	off	on
TST 2 S (-ESD)	mom	off	mom
TST 2 T (-ESD)	on	off	mom
TST 2 PA (-ESD)	on	on	on
TST 2 SA (-ESD)	mom	on	mom
TST 2 TA (-ESD)	on	on	mom



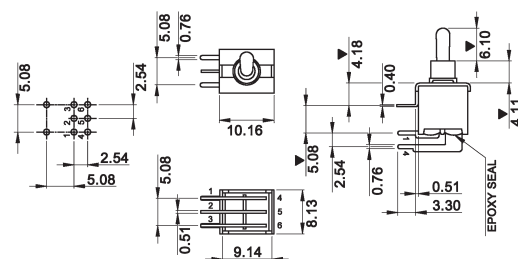


washable

2



TST 2 N – RA (-ESD)	on	–	on
TST 2 R – RA (-ESD)	on	–	mom
TST 2 P – RA (-ESD)	on	off	on
TST 2 S – RA (-ESD)	mom	off	mom
TST 2 T – RA (-ESD)	on	off	mom
TST 2 PA – RA (-ESD)	on	on	on
TST 2 SA – RA (-ESD)	mom	on	mom
TST 2 TA – RA (-ESD)	on	on	mom



Microminiature Toggle Switches ESD proof



Specifications:

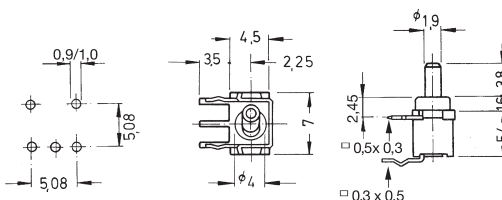
Contact rating:	max. 28 V DC, 0,4 VA min. 20 mV DC, 1 μ A
Contact resistance:	< 100 m Ω
Insulation resistance:	> 500 M Ω at 250 V DC
Dielectric strength:	250 V, 50 Hz for the duration of 1 minute
Operating temperature:	- 20° to + 80° C
Mechanical life:	minimum 30 000 operations
Contacts:	phosphor bronze, gold-plated
Terminals:	PC terminals, crimped, phosphor bronze, gold-plated
Material:	case and lever: PES, meets UL 94 V-0, washable
Mounting:	on pc-board
Soldering conditions:	auto-soldering – max.: 7 sec, 250° C \pm 5° C – max.: 5 sec, 270° C \pm 5° C
ESD resistance:	> 8 kV (between lever and terminals)

Models :	Switching functions:	the closed contacts are opposite to the lever position;
	Switching functions F/H:	when looking at the brand name on the right hand side.

washable

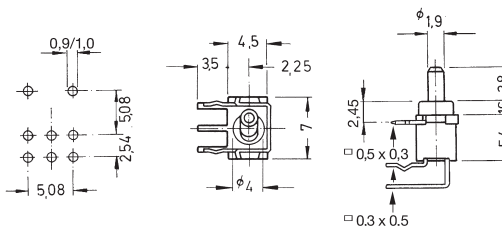
SPDT

FT 1 D – RA	on	–	on
FT 1 E – RA	on	off	on
FT 1 F – RA*	mom	–	on
FT 1 G – RA*	mom	off	mom
FT 1 H – RA*	mom	off	on

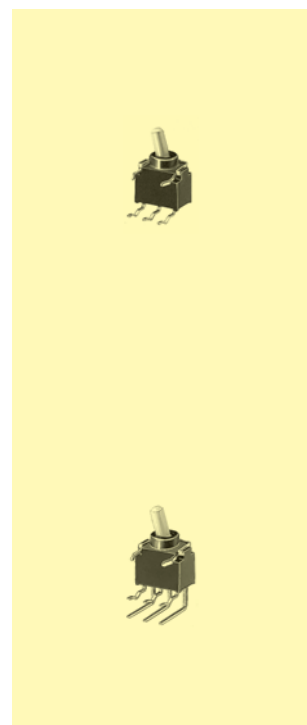


DPDT

FT 2 D – RA	on	–	on
FT 2 E – RA	on	off	on
FT 2 F – RA*	mom	–	on
FT 2 G – RA*	mom	off	mom
FT 2 H – RA*	mom	off	on



* Non-stock item; minimum quantity and delivery time on request





Microminiature Toggle Switches ESD proof

Models:

Switching functions:

the closed contacts are opposite to the lever position;

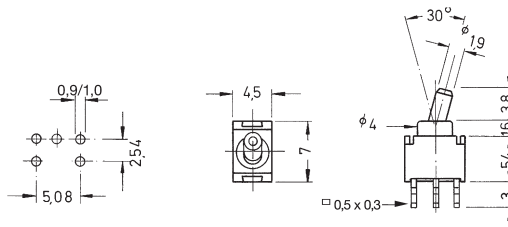
Switching functions F/H:

when looking at the brand name on the left hand side.

washable

SPDT

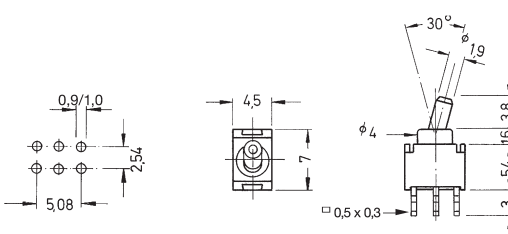
FT 1 D	on	—	on
FT 1 E	on	off	on
FT 1 F	mom	—	on
FT 1 G	mom	off	mom
FT 1 H	mom	off	on



2

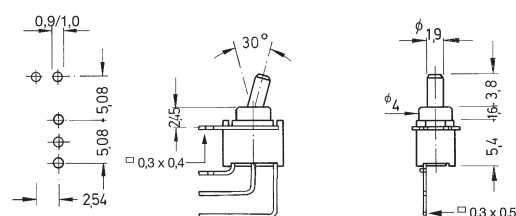
DPDT

FT 2 D	on	—	on
FT 2 E	on	off	on
FT 2 F	mom	—	on
FT 2 G	mom	off	mom
FT 2 H	mom	off	on



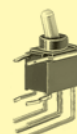
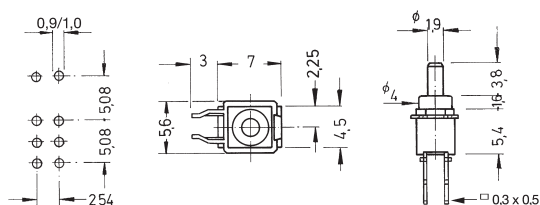
SPDT

FT 1 D-VM	on	—	on
FT 1 E-VM	on	off	on
FT 1 F-VM*	mom	—	on
FT 1 G-VM*	mom	off	mom
FT 1 H-VM*	mom	off	on



DPDT

FT 2 D-VM	on	—	on
FT 2 E-VM	on	off	on
FT 2 F-VM*	mom	—	on
FT 2 G-VM*	mom	off	mom
FT 2 H-VM*	mom	off	on



* Non-stock item; minimum quantity and delivery time on request

