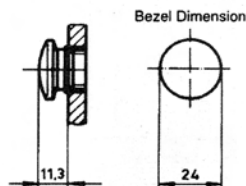




Mushroom / Momentary / Maintained

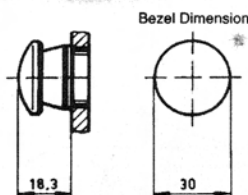
Round concealed bezel style

IP40



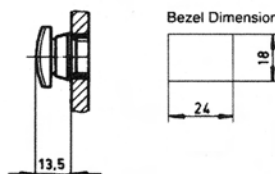
Sealed round aluminum bezel style

IP65



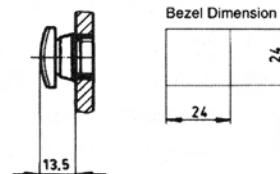
Rectangular tapered bezel style

IP40



Square tapered bezel style

IP40



	Contact Block	Bezel
	1NO+1 NC	Black
Momentary Switch	base	404004
	1	404104
	2	404204
	3	404304
	4	404404
Maintained Switch	base	414004
	1	414104
	2	414204
	3	414304
	4	414404

	Contact Block	Bezel
	1NO+1 NC	Aluminum
Momentary Switch	base	404019
	1	404119
	2	404219
	3	404319
	4	404419
Maintained Switch	base	414019
	1	414119
	2	414219
	3	414319
	4	414419

	Contact Block	Bezel
	1NO+1 NC	Black
Momentary Switch	base	400004
	1	400104
	2	400204
	3	400304
	4	400404
Maintained Switch	base	410004
	1	410104
	2	410204
	3	410304
	4	410404

	Contact Block	Bezel
	1NO+1 NC	Black
Momentary Switch	base	402004
	1	402104
	2	402204
	3	402304
	4	402404
Maintained Switch	base	412004
	1	412104
	2	412204
	3	412304
	4	412404

CAP & ACTUATOR ORDERED AS ONE UNIT, SPECIFY CAP COLOR

Mushroom caps Ø24

white	464006
yellow	464106
green	464206
blue	464306
red	464406
black	464506

Mushroom caps Ø30

white	464007
yellow	464107
green	464207
blue	464307
red	464407
black	464507

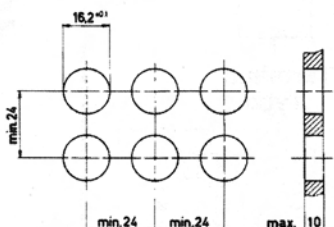
Mushroom caps 18 x 24

white	460004
yellow	460104
green	460204
blue	460304
red	460404
black	460504

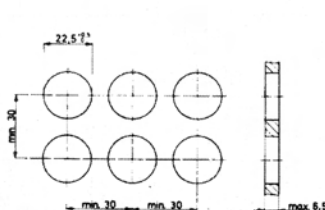
Mushroom caps 24 x 24

white	462005
yellow	462105
green	462205
blue	462305
red	462405
black	462505

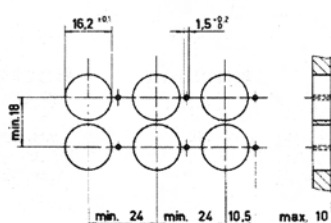
PANEL CUT-OUTS Ø24



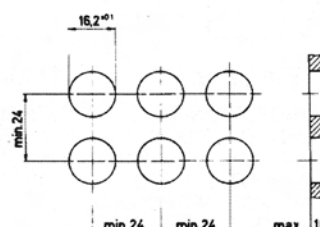
PANEL CUT-OUTS Ø30 SEALED



PANEL CUT-OUTS 18 X 24



PANEL CUT-OUTS 24 X 24



COMMON INFORMATION

Maintained mushroom switches are un-latched by pulling the mushroom caps. (Larger spacing between switches is required).

For a PUSH PUSH version use maintained switch part number and add suffix 900.

The bezel Ø30 is made of anodized aluminum alloy and is also available in black anodized aluminum by adding the suffix 500 i.e. 404018 500.

WIRING DIAGRAM

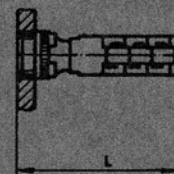


250V AC/5A (cos w 0.7)

Dimensional Data for behind panel

Length = L Ø24 Ø30

	18x24		24x24	
	mm	Inches	mm	Inches
Pole 1	44.5	1.752	43.5	1.713
Pole 2	53	2.087	52	2.047
Pole 3	61.5	2.421	60.5	2.382
Pole 4	70	2.756	69	2.717



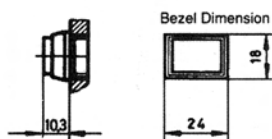
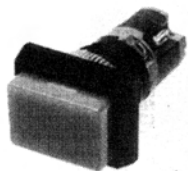


Momentary / Maintained / Signal Lamps

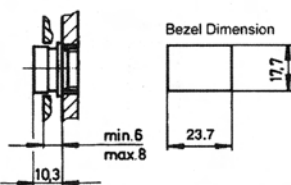
2

SWITCHES & KNOBS

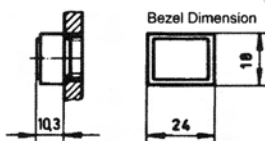
Rectangular tapered bezel style



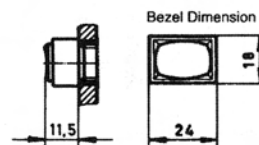
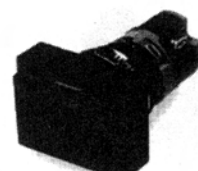
Rectangular concealed bezel style



Rectangular flat lens exposed bezel style



Rectangular concave lens exposed bezel style



	Contact Block	Bezel
	1NO+1 NC	Black
Momentary Switch	Base	500000
	1	500100
	2	500200
	3	500300
	4	500400

Maintained Switch	Base	510000
	1	510100
	2	510200
	3	510300
	4	510400

Indicator Lamp	550000
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	Lens 14 x 20	
	Opaque	Transparent
white	460012	461012
yellow	460112	461112
green	460212	461212
blue	460312	461312
red	460412	461412
black	460512	
orange	460612	461612

	Contact Block	Bezel
	1NO+1 NC	Black
Momentary Switch	Base	500002
	1	500102
	2	500202
	3	500302
	4	500402

Maintained Switch	Base	510002
	1	510102
	2	510202
	3	510302
	4	510402

Indicator Lamp	550037
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	Lens 18 x 24	
	Opaque	Transparent
white	460017	461017
yellow	460117	461117
green	460217	461217
blue	460317	461317
red	460417	461417
black	460517	
orange	460617	461617

	Contact Block	Bezel
	1NO+1 NC	Black
Momentary Switch	Base	500008
	1	500108
	2	500208
	3	500308
	4	500408

Maintained Switch	Base	510008
	1	510108
	2	510208
	3	510308
	4	510408

Indicator Lamp	550008
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	Lens flat 15 x 21	
	Opaque	Transparent
white	460021	461021
yellow	460121	461121
green	460221	461221
blue	460321	461321
red	460421	461421
black	460521	
orange	460621	461621

	Contact Block	Bezel
	1NO+1 NC	Black
Momentary Switch	Base	500008
	1	500108
	2	500208
	3	500308
	4	500408

Maintained Switch	Base	510008
	1	510108
	2	510208
	3	510308
	4	510408

Indicator Lamp	550008
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	Lens concave 15 x 21	
	Opaque	Transparent
white	460022	461022
yellow	460122	461122
green	460222	461222
blue	460322	461322
red	460422	461422
black	460522	
orange	460622	461622

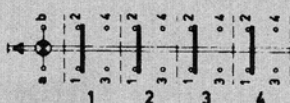
COMMON INFORMATION

For a brighter light, all transparent lens can be specified with a clear lower lens diffuser. Use 010 suffix (i.e. 461012 010).

The concealed bezel style is especially suitable for mimic diagrams and for mounting with lens immediately next to each other.

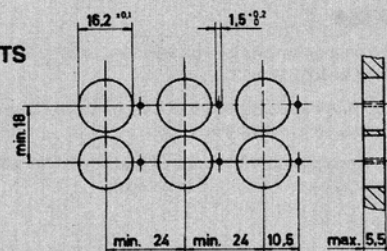
All maintained switches incorporate a bifunctional mechanism for changing the function from maintained to momentary and back again.

WIRING DIAGRAM



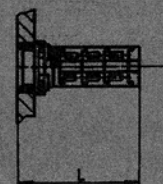
250V AC/5A (cos ϕ 0.7)
Lamp holder T 1 $\frac{3}{4}$ MG

PANEL CUT-OUTS



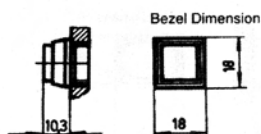
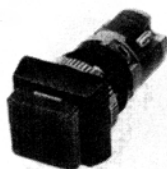
Dimensional Data for behind panel

Length = L	mm	Inches
Pole 1	27.5	1.083
Pole 2	36	1.417
Pole 3	44.5	1.752
Pole 4	53	2.087
Indicator lamp	23.5	.925

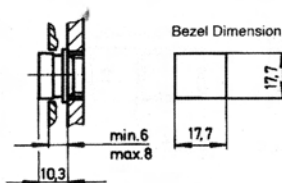
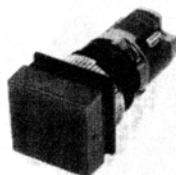


Momentary / Maintained / Signal Lamps

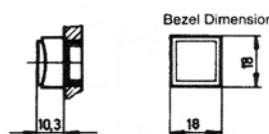
Square tapered bezel style



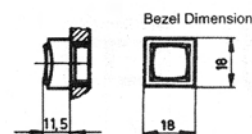
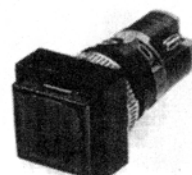
Square concealed bezel style



Square flat lens exposed bezel style



Square concave lens exposed bezel style



	Contact Block	Bezel
	1NO+1 NC	Black
Momentary Switch	Base	502000
	1	502100
	2	502200
	3	502300
	4	502400

	Contact Block	Bezel
	1NO+1 NC	Black
Momentary Switch	Base	502002
	1	502102
	2	502202
	3	502302
	4	502402

	Contact Block	Bezel
	1NO+1 NC	Black
Momentary Switch	Base	502008
	1	502108
	2	502208
	3	502308
	4	502408

	Contact block	Bezel
	1NO+1 NC	black
Momentary Switch	Base	502008
	1	502108
	2	502208
	3	502308
	4	502408

Maintained Switch	Base	512000
	1	512100
	2	512200
	3	512300
	4	512400

Maintained Switch	Base	512002
	1	512102
	2	512202
	3	512302
	4	512402

Maintained Switch	Base	512008
	1	512108
	2	512208
	3	512308
	4	512408

Maintained Switch	Base	512008
	1	512108
	2	512208
	3	512308
	4	512408

Indicator Lamp	552000
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Indicator Lamp	552037
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Indicator Lamp	552008
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Indicator Lamp	552008
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Lens 14 x 14		
	Opaque	Transparent
white	462013	463013
yellow	462113	463113
green	462213	463213
blue	462313	463313
red	462413	463413
black	462513	
orange	462613	463613

Lens 18 x 18		
	Opaque	Transparent
white	462018	463018
yellow	462118	463118
green	462218	463218
blue	462318	463318
red	462418	463418
black	462518	
orange	462618	463618

Lens flat 15 x 15		
	Opaque	Transparent
white	462021	463021
yellow	462121	463121
green	462221	463221
blue	462321	463321
red	462421	463421
black	462521	
orange	462621	463621

Lens concave 15 x 15		
	Opaque	Transparent
white	462022	463022
yellow	462122	463122
green	462222	463222
blue	462322	463322
red	462422	463422
black	462522	
orange	462622	463622

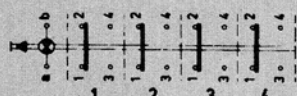
COMMON INFORMATION

For a brighter light, all transparent lens can be specified with a clear lower lens diffuser. Use 010 suffix (i.e. 461012 010).

The concealed bezel style is especially suitable for mimic diagrams and for mounting with lens immediately next to each other.

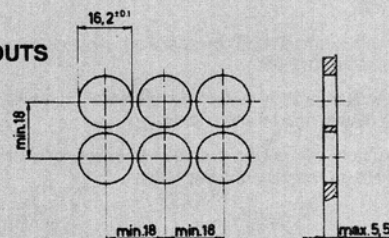
All maintained switches incorporate a bifunctional mechanism for changing the function from maintained to momentary and back again.

WIRING DIAGRAM



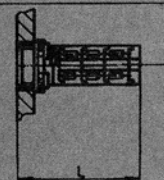
250V AC/5A (cos ϕ 0.7)
Lamp holder T 1³ MG

PANEL CUT-OUTS



Dimensional Data for behind panel

Length = L	mm	Inches
Pole 1	27.5	1.083
Pole 2	36	1.417
Pole 3	44.5	1.752
Pole 4	53	2.087
Indicator lamp	23.5	.925



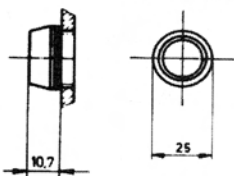
Momentary / Maintained / Signal Lamps

Round aluminum bezel style

IP40



Bezel Dimension



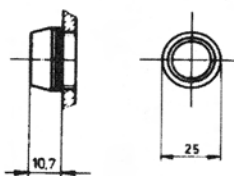
	Contact Block 1NO+1 NC	Bezel Standard
Momentary Switch	Base	504018
	1	504118
	2	504218
	3	504318
	4	504418
Maintained Switch	Base	514018
	1	514118
	2	514218
	3	514318
	4	514418
Indicator Lamp		554018

Round sealed aluminum bezel style

Special lens increases rating to IP65



Bezel Dimension



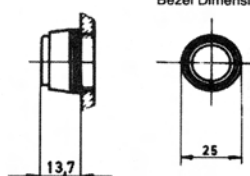
	Contact Block 1NO+1 NC	Bezel Standard
Momentary Switch	Base	504018
	1	504118
	2	504218
	3	504318
	4	504418
Maintained Switch	Base	514018
	1	514118
	2	514218
	3	514318
	4	514418
Indicator Lamp		554018

Round sealed aluminum bezel style

With built-in silicone cap.
IP65



Bezel Dimension



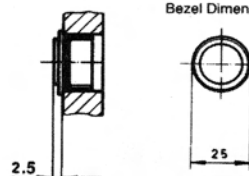
	Contact Block 1NO+1 NC	With Built-in Silicone Cap
Momentary Switch	Base	504033
	1	504133
	2	504233
	3	504333
	4	504433
Maintained Switch	Base	514033
	1	514133
	2	514233
	3	514333
	4	514433
Indicator Lamp		554033

Round flush metal bezel style

IP40



Bezel Dimension



	Contact Block 1NO+1 NC	Part Number
Momentary Switch	Base	504050
	1	504150
	2	504250
	3	504350
	4	504450
Maintained Switch	Base	514050
	1	514150
	2	514250
	3	514350
	4	514450
Indicator Lamp		554050

Lens Ø18mm IP40

	Opaque	Transparent
white	464015	465015
yellow	464115	465115
green	464215	465215
blue	464315	465315
red	464415	465415
black	464515	
orange	464615	465615

Bezels made of anodized aluminum alloy are also available in black anodized aluminum by adding the suffix 500 i.e. 404018 500.

Lens Ø18mm IP65

	Opaque	Transparent
white	464001	465001
yellow	464101	465101
green	464201	465201
blue	464301	465301
red	464401	465401
black	464501	
orange	464601	465601

Bezels made of anodized aluminum alloy are also available in black anodized aluminum by adding the suffix 500 i.e. 404018 500. It is splash proof and oil tight in accordance with IP65.

The IP65 standard (splash proof oil tight) is achieved with a sealing ring which comes supplied with corresponding lens.

Lens Ø18mm IP65

	Opaque	Transparent
white	464001	465001
yellow	464101	465101
green	464201	465201
blue	464301	465301
red	464401	465401
black	464501	
orange	464601	465601

Bezels made of anodized aluminum alloy are also available in black anodized aluminum by adding the suffix 500 i.e. 404018 500. It is splash proof and oil tight in accordance with IP65.

Lens Ø18mm

	Opaque	Transparent
white	464015	465015
yellow	464115	465115
green	464215	465215
blue	464315	465315
red	464415	465415
black	464515	
orange	464615	465615

Bezels made of anodized aluminum alloy are also available in black anodized aluminum by adding the suffix 500 i.e. 404018 500.

COMMON INFORMATION

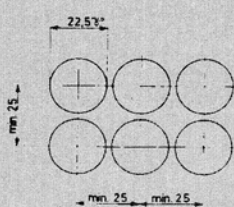
For a brighter light, all transparent lens can be specified with a clear lower lens diffuser. Use 010 suffix (i.e. 461012 010).

WIRING DIAGRAM



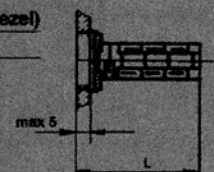
250V AC/5A (cos w 0.7)
Lamp holder T 1³ MG

PANEL CUT-OUTS



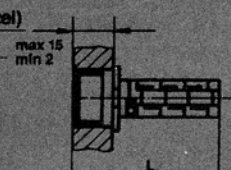
Dimensional Data for behind panel (not flush bezel)

Length = L	(mm)	Inches
Pole 1	26.5	1.043
Pole 2	35	1.373
Pole 3	43.5	1.713
Pole 4	52	2.047
Indicator lamp	22.5	.886



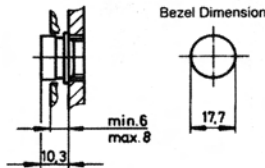
Dimensional Data for behind panel (flush bezel)

Length = L	(mm)	Inches
Pole 1	35	1.378
Pole 2	43.5	1.713
Pole 3	52	2.047
Pole 4	60.5	2.382
Indicator lamp	32	1.260



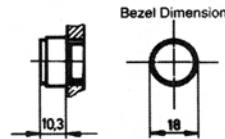
Momentary / Maintained / Signal Lamps

Round concealed bezel style



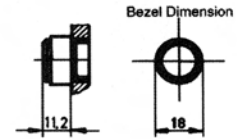
	Contact Block 1NO+1 NC	Bezel Black
Momentary Switch	Base	504002
	1	504102
	2	504202
	3	504302
	4	504402
Maintained Switch	Base	514002
	1	514102
	2	514202
	3	514302
	4	514402
Indicator Lamp		554037

Round flat lens exposed bezel style



	Contact Block 1NO+1 NC	Bezel Black
Momentary Switch	Base	504008
	1	504108
	2	504208
	3	504308
	4	504408
Maintained Switch	Base	514008
	1	514108
	2	514208
	3	514308
	4	514408
Indicator Lamp		554008

Round concave lens exposed bezel style



	Contact Block 1NO+1 NC	Bezel Black
Momentary Switch	Base	504008
	1	504108
	2	504208
	3	504308
	4	504408
Maintained Switch	Base	514008
	1	514108
	2	514208
	3	514308
	4	514408
Indicator Lamp		554008

	Lens flat Ø18	
	Opaque	Transparent
white	464015	465015
yellow	464115	465115
green	464215	465215
blue	464315	465315
red	464415	465415
black	464515	
orange	464615	465615

	Lens flat Ø15mm	
	Opaque	Transparent
white	464021	465021
yellow	464121	465121
green	464221	465221
blue	464321	465321
red	464421	465421
black	464521	
orange	464621	465621

	Lens concave Ø15mm	
	Opaque	Transparent
white	464022	465022
yellow	464122	465122
green	464222	465222
blue	464322	465322
red	464422	465422
black	464522	
orange	464622	465622

COMMON INFORMATION

For a brighter light, all transparent lens can be specified with a clear lower lens diffuser. Use 010 suffix (i.e. 461012 010).

The concealed bezel style is especially suitable for mimic diagrams and for mounting with lens immediately next to each other.

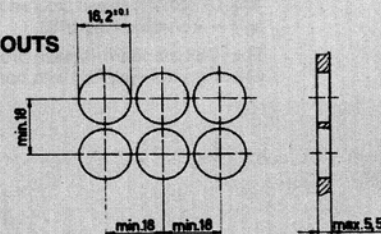
All maintained switches incorporate a bifunctional mechanism for changing the function from maintained to momentary and back again.

WIRING DIAGRAM



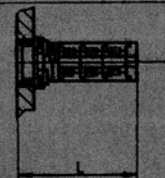
250V AC/5A (cos ϕ 0.7)
Lamp holder T 1 $\frac{3}{4}$ MG

PANEL CUT-OUTS



Dimensional Data for behind panel

Length = L	mm	Inches
Pole 1	27.5	1.083
Pole 2	36	1.417
Pole 3	44.5	1.752
Pole 4	53	2.087
Indicator lamp	23.5	.925



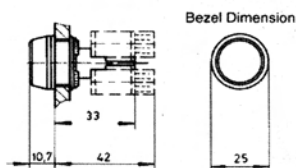
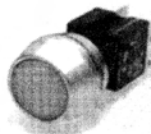
Momentary / Maintained / Signal Lamps

2

SWITCHES & KNOBS

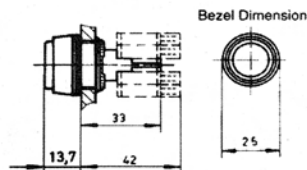
Round aluminum bezel style

IP65/IP40



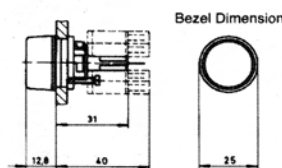
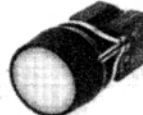
Round aluminum bezel style

**With built in silicone cap.
IP65**



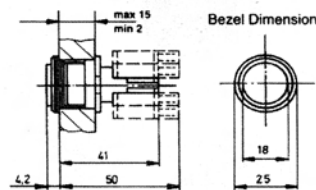
**Round straight plastic
bezel style Q25**

IP65



Round flush metal bezel style

IP67



	Faston Connection	Solder Connection
Momentary	505018	505118
Maintained	515018	515118
Indicator lamps	555018	555118

	Faston Connection	Solder Connection
Momentary	505033	505133
Maintained	515033	515133
Indicator lamps	555033	555133

	Faston Connection	Solder Connection
Momentary	505020	505120
Maintained	515020	515120
Indicator lamps	555020	555120

	Faston Connection	Solder Connection
Momentary	505051	505151
Maintained	515051	515151
Indicator lamps	555051	555151

Lens Ø18 IP65		
	Opaque	Transparent
white	464001	465001
yellow	464101	465101
green	464201	465201
blue	464301	465301
red	464401	465401
black	464501	
orange	464601	465601

Lens Ø18 IP65		
	Opaque	Transparent
white	464001	465001
yellow	464101	465101
green	464201	465201
blue	464301	465301
red	464401	465401
black	464501	
orange	464601	465601

Lens flat Ø21 IP65		
	Opaque	Transparent
white	564024	565024
yellow	564124	565124
green	564224	565224
blue	564324	565324
red	564424	565424
black	564524	
orange	564624	565624

Lens flat Ø18 IP67		
	Opaque	Transparent
white	564025	565025
yellow	564125	565125
green	564225	565225
blue	564325	565325
red	564425	565425
black	564525	
orange	564625	565625

Lens Ø18 IP40		
	Opaque	Transparent
white	464015	465015
yellow	464115	465115
green	464215	465215
blue	464315	465315
red	464415	465415
black	464515	
orange	464615	465615

Bezels made of anodized aluminum alloy are also available in black anodized aluminum by adding the suffix 500 i.e. 404018 500. It is splash proof and oil tight in accordance with IP65, similar to NEMA 4 and 13.

The IP65 standard (splash proof oil tight) is achieved with a sealing ring which comes supplied with the corresponding lens.

Splash proof and oil tight in accordance with IP65, similar to NEMA 4 and 13.

Bezels made of anodized aluminum alloy are also available in black anodized aluminum by adding the suffix 500 i.e. 404018 500.

It is splash proof and oil tight in accordance with IP67 and submersible up to 1.2 meters. Exceeds NEMA 6.

Bezels made of anodized aluminum alloy are also available in black anodized aluminum by adding the suffix 500 i.e. 404018 500. It is splash proof and oil tight in accordance with IP65.

The IP65 standard (splash proof oil tight) is achieved with a sealing ring which comes supplied with the corresponding lens.

An IP40 version can be achieved by specifying standard lens caps Ø18 IP40.

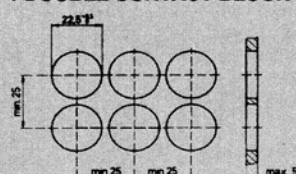
ORDER CONTACT BLOCK SEPARATELY

**COMMON INFORMATION
CONTACT BLOCKS TO BE
SPECIFIED SEPARATELY.**

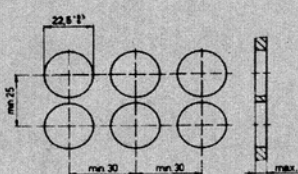
Lamp holder T 1 $\frac{3}{4}$ MG

For a brighter light, all transparent lens can be specified with a clear lower lens diffuser. Use 010 suffix (i.e. 461012 010).

**PANEL CUT-OUTS FOR UP TO 1 SINGLE
CONTACT BLOCK
+ 1 DOUBLE CONTACT BLOCK**

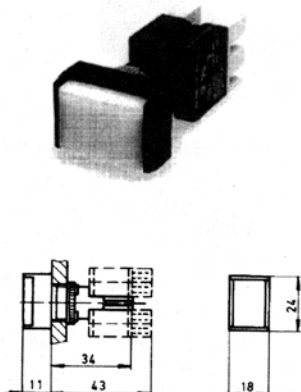


**PANEL CUT-OUTS FOR
2 DOUBLE CONTACT BLOCK**

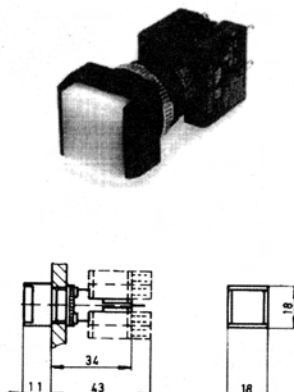


Momentary / Maintained / Signal Lamps

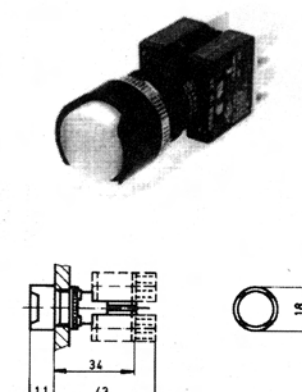
Rectangular straight bezel style, 18x24



Square straight bezel style, 18x18



Round bezel style, Ø18



	Faston Connection	Solder Connection
Momentary switches	501015	501115
Maintained switches	511015	511115
Signal lamps	551015	551115

	Faston Connection	Solder Connection
Momentary switches	503015	503115
Maintained switches	513015	513115
Signal lamps	553015	553115

	Faston Connection	Solder Connection
Momentary switches	505015	505115
Maintained switches	515015	515115
Signal lamps	555015	555115

Lens flat 15x21		
	Opaque	Transparent
white	560011	561011
yellow	560111	561111
green	560211	561211
blue	560311	561311
red	560411	561411
black	560511	
orange	560611	561611

Lens flat 15x15		
	Opaque	Transparent
white	562011	563011
yellow	562111	563111
green	562211	563211
blue	562311	563311
red	562411	563411
black	562511	
orange	562611	563611

Lens flat Ø15		
	Opaque	Transparent
white	564011	565011
yellow	564111	565111
green	564211	565211
blue	564311	565311
red	564411	565411
black	564511	
orange	564611	565611

ORDER CONTACT BLOCK SEPARATELY

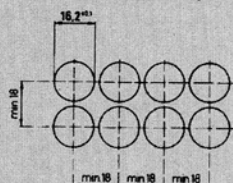
COMMON INFORMATION

The switch is dust proof and oil tight and is submersible up to 1.2 meters. Exceeds NEMA 6.

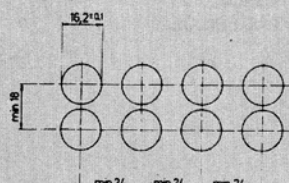
When using incandescent lamps ambient temperature = max. 55°C.

CONTACT BLOCKS TO BE SPECIFIED SEPARATELY. Lamp holder T $1\frac{3}{4}$ MG

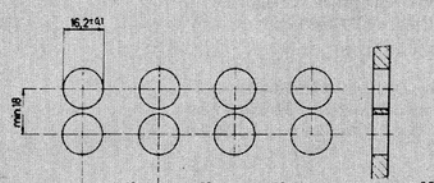
PANEL CUT-OUTS FOR UP TO 2 SINGLE CONTACT BLOCKS (18X18 AND Ø18 STYLE ONLY).



PANEL CUT-OUTS FOR UP TO 1 SINGLE + 1 DOUBLE CONTACT BLOCK



PANEL CUT-OUTS FOR UP TO 2 DOUBLE CONTACT BLOCKS

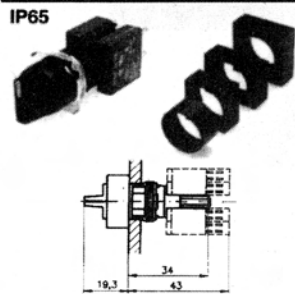


3 - Position Rotary Switches

2

SWITCHES & KNOBS

3 position snap-on bezel

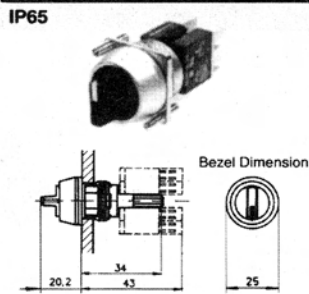


Function	Part Number	Function	Part Number
----------	-------------	----------	-------------

Rotary Element

	2	508045		2	508047
	2	508046		2	508048

3 position Metal bezel Ø25

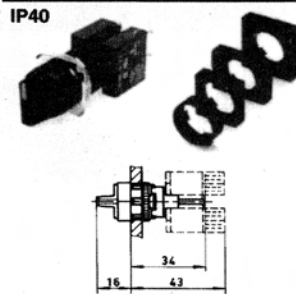


Function	Part Number	Function	Part Number
----------	-------------	----------	-------------

Rotary Element

	2	508060		2	508062
	2	508061		2	508063

3 position interchangeable bezel

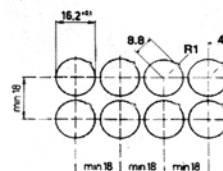


Function	Part Number	Function	Part Number
----------	-------------	----------	-------------

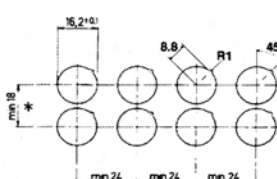
Rotary Element

	2	508040		2	508042
	2	508041		2	508043

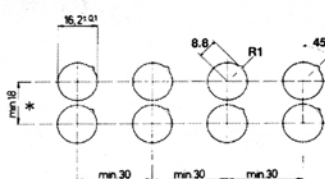
PANEL CUT-OUTS FOR UP TO 2 SINGLE CONTACT BLOCKS (18X18 AND Ø18 STYLE ONLY)



PANEL CUT-OUTS FOR UP TO 1 SINGLE + 1 DOUBLE



PANEL CUT-OUTS FOR UP TO 2 DOUBLE CONTACT BLOCKS



Black Bezel

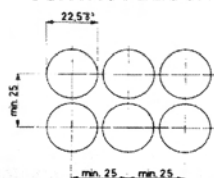
18 x 24	24 x 24 (engrivable)	18 x 18	Ø 18
593060	593066	593062	593064



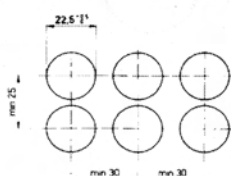
The bezels are easily interchangeable. The switch cannot be installed without a bezel.

Bezels made of anodized aluminum alloy are also available in black anodized aluminum by adding the suffix 500 i.e. 404018 500. It is splash proof and oil tight in accordance with IP65, similar to NEMA 4 and 13.

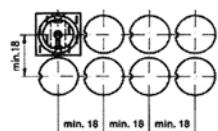
PANEL CUT-OUTS FOR UP TO 1 SINGLE + 1 DOUBLE CONTACT BLOCK



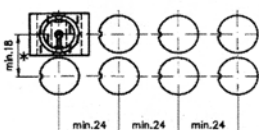
PANEL CUT-OUTS FOR UP TO 2 DOUBLE CONTACT BLOCKS



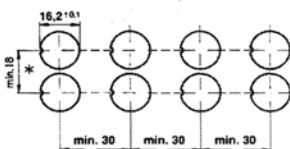
PANEL CUT-OUTS FOR UP TO 2 SINGLE CONTACT BLOCKS (18X18 AND Ø18 STYLE ONLY)



PANEL CUT-OUTS FOR UP TO 1 SINGLE + 1 DOUBLE CONTACT BLOCK



PANEL CUT-OUTS FOR UP TO 2 DOUBLE CONTACT BLOCKS



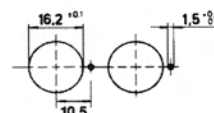
Black Bezel

18 x 24	24 x 24 (engrivable)	18 x 18	Ø 18
493060	493066	493062	493064



The bezels are easily interchangeable. The switch cannot be installed without a bezel.

PLEASE USE FOLLOWING PANEL-CUT OUT PROFILE WHEN 18X24 & 24X24 BEZEL



ORDER CONTACT BLOCK SEPARATELY

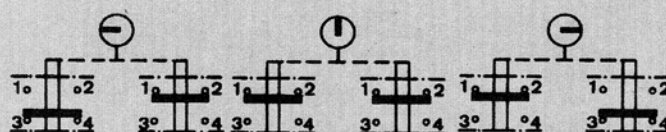
COMMON INFORMATION

The rotary knob is supplied in black. The indicating bar is marked in white.

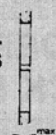
* NB THIS DIMENSION WILL INCREASE TO 24MM IF 24X24 BEZEL STYLE IS USED.

CONTACT BLOCKS TO BE SPECIFIED SEPARATELY.

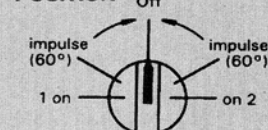
WIRING DIAGRAM (3 POSITION)



PANEL THICKNESS

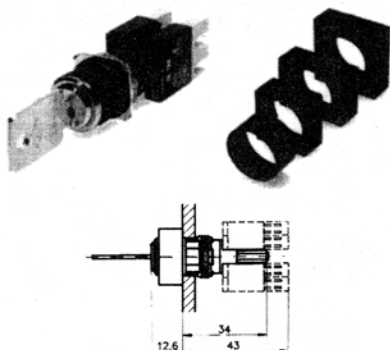


KNOB POSITION



2 - Position / 3 - Position / Key Switches

KABA MICRO & KABA MICRO-E 2 position with snap-on bezels

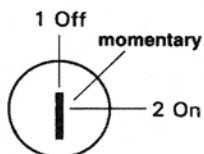


	Key Removable in Position			
	1 (mom) Off	2 On	1 Off	1+2 On+Off
KABA MICRO	548132	548134	548136	548138
KABA MICRO-E	548175		548176	548177

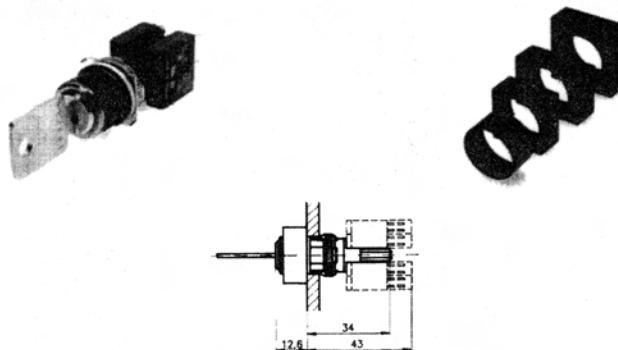
Black Bezel			
18 x 24	24 x 24 (engravable)	18 x 18	Ø 18
593060	593066	593062	593064

Once a bezel has been assembled it can no longer be removed.

KEY POSITION



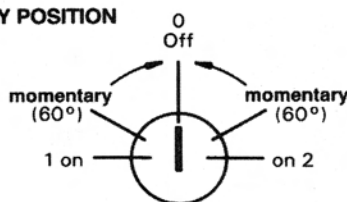
KABA MICRO 3 position with snap-on bezels



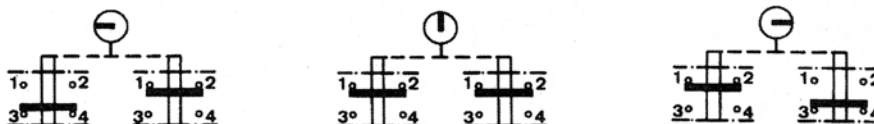
Function	Part Number	Function	Part Number	Function	Part Number
Cylinder Element					
	548150		548155		548160
	548151		548156		548161
	548152		548157		548162
	548153		548158		
	548154		548159		

* = Key in removable position

KEY POSITION



WIRING DIAGRAM



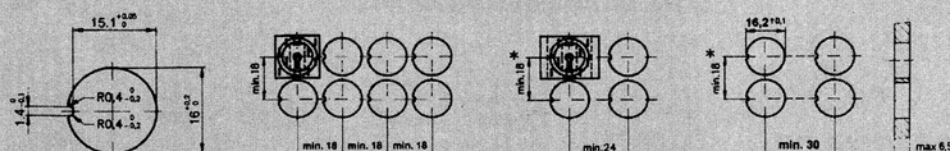
COMMON INFORMATION

**ORDER CONTACT
BLOCK SEPARATELY**

**PANEL CUT-OUTS FOR
UP TO 2 SINGLE
CONTACT BLOCKS
(18X18 AND Ø18 STYLE
ONLY).**

**PANEL CUT-OUTS FOR
UP TO 1 SINGLE + 1 DOUBLE
CONTACT BLOCK**

**PANEL CUT-OUTS FOR
UP TO 2 DOUBLE
CONTACT BLOCKS**



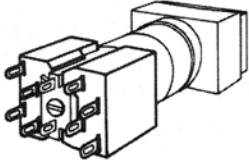
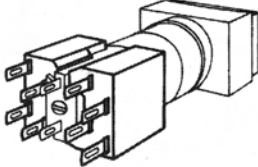
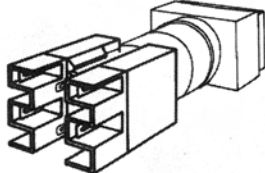


























* NB THIS DIMENSION WILL INCREASE TO 24MM IF 24X24 BEZEL STYLE IS USED.



Contact Block Selector Chart

2

SWITCHES & KNOBS

CONTACT ARRANGEMENT AND WIRING DIAGRAM	Solder terminals	Faston terminals 2.8 x 0.5 mm	Faston terminals shielded 2.8 x 0.5 mm
250V AC/5A (cos w 0.7)	 For wire 2x 0.75 mm ² or strands 1x1 mm ² . 2 solid AWG 18 or 2 stranded AWG 20	 For faston plug and cable plug. 2.8 x 0.5mm (.110 x .020)	 With extended insulation for single connectors. 2.8 x 0.5mm (.110 x .020)
 1 NC + 1 NO	 Gold 593561 000 Silver 593561 100	 Gold 593566 000 Silver 593566 100	 Gold 593560 000 Silver 593560 100
 2 NC + 2 NO	 Gold 593564 000 Silver 593564 100	 Gold 593567 000 Silver 593567 100	 Gold 593563 000 Silver 593563 100
 1 NO	 Gold 593561 020	 Gold 593566 020	 Gold 593560 020
 1 NC	 Gold 593561 050	 Gold 593566 050	 Gold 593560 050
 2 NO	 Gold 593564 020	 Gold 593567 020	 Gold 593563 020
 2 NC	 Gold 593564 050	 Gold 593567 050	 Gold 593563 050
250V AC/6A 	Faston Terminal 593650 000 .250 terminals Screw Terminal 593650 200 wires from AWG 18 to AWG 32	250V AC/16A 	Faston Terminal 593651 000 .250 terminals Screw Terminal 593651 200 wires from AWG 18 to AWG 32

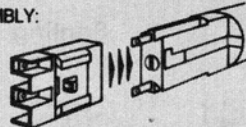
MINIMUM REQUIREMENT

Switch body for example 501000-000
 Contact block for example 593561-000
 Lens cap for example 460012-000

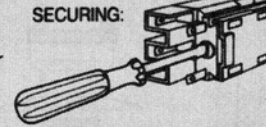
Contact blocks are ordered separately from switch activator.

QUICK MOUNTING OF THE CONTACT BLOCKS
SIMPLY BY SLIDING ON AND SECURING

ASSEMBLY:



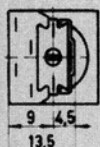
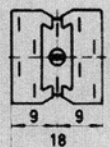
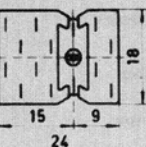
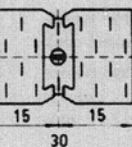
SECURING:



The contact block slides on to the dovetail of the switch body while the slot in the red locking pin is parallel to the dovetail.

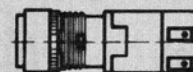
Once the contact block is fully in position the red locking cam is turned through 90° with a suitable screwdriver.

1 NC + 1 NO

1 NC + 1 NO/
1 NC + 1 NO
(2 NC + 2 NO)2 NC + 2 NO/
1 NC + 1 NO
(3 NC + 3 NO)2 NC + 2 NO/
2 NC + 2 NO
(4 NC + 4 NO)

SELECTOR MECHANISM

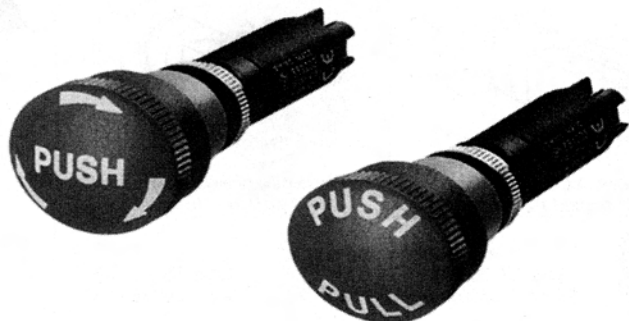
All maintained switches in the th25 series feature a simple bifunctional selector mechanism that converts the maintained switch to momentary and back again. The selection is made by moving a small wire clip which is visible through an aperture in the body of the switch, with a device such as a paper clip.



Emergency stop switches according to EN 418

IP66/IP67

Panel cut-out 16.2 mm



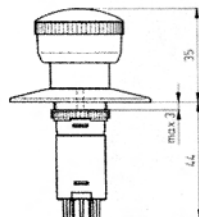
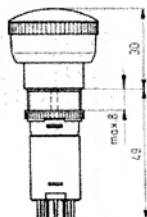
- mushroom cap Ø 27 mm
- meet EN 418 regulations (can not be defeated)
- SUVA approval
- rotary reset or pull reset
- faston terminals 2.8 x 0.5 mm
- weight: 16.8 g

	rotary reset	pull reset
1NC + 1NO 2NC	880 203 000 880 204 000	881 203 000 881 204 000

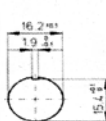
pull reset
available approx. June 1999

Accessories

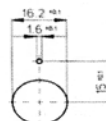
Background disk Ø 43 mm x 5 mm for panel cut-out 16.2 mm	<ul style="list-style-type: none"> • yellow plastic • including seal <p>with printing 893 002 000</p> <p>without printing 893 003 000</p>	
Adapterset Ø 43 mm x 5 mm for panel cut-out 22.5 mm	<ul style="list-style-type: none"> • yellow plastic • including seal and washer <p>with printing 893 000 000</p> <p>without printing 893 001 000</p>	
Background decal Ø 43 mm x 0.1 mm for panel cut-out 16.2 mm	<ul style="list-style-type: none"> • self adhesive PVC-leaf, yellow <p>with printing 893 011 000</p> <p>without printing 893 010 000</p>	



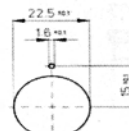
Printing in further languages upon request



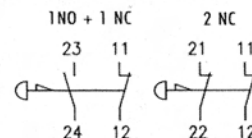
for back-ground
decal
for panel
cut-out
16.2 mm



for back-ground
disk
for panel
cut-out
16.2 mm



for adapter
set
for panel
cut-out
22.5 mm





Technical Data

2

SWITCHES & KNOBS

General**BEZEL**

Noryl, anodized aluminum alloy.

MOUNTING

Central with metal nut. Mounting tools available from T&H.

LENS

Engravable polycarbonate in different colors.

CONTACT BLOCK CASING

Diallylphthalate, heat-resisting and self-quenching (UL 94 VO).

SWITCHING CONTACTS

Silver nickel contacts, 5µ gold-plated (for small currents and voltage) or, 5µ silver plated.

CONTACT BLOCK TERMINALS

th4 & th5. Patented, bendable gold-plated double solder terminals will accept 2 x AWG 18 stranded or 4 x AWG 20 wire. th25 gold or silver plated solder terminals accept 2 solid AWG 18 or 2 stranded AWG 20 wire. Faston accepts 2.8 x 0.5 mm (.110 x .020) terminals.

AMBIENT TEMPERATURE

-30°C to +55°C

Heat congestion in assemblies of illuminated switches and signal lamps should be avoided.

PROTECTIVE SYSTEMS

General IP40, oil tight and dust proof.

Special oil-tight, splash-proof and submersible switches in accordance with IP65 and IP67.

TEST MARKS

SEV, VDE, DEMKO, SEMKO, NEMKO, CEE, SUVA, OEVE, UL and CSA.

VIBRATION

Amplitude 1.5mm pp at 55 Hz at 0.060 D.A.

ACCELERATION

10g in all three planes.

DIELECTRIC STRENGTH

2000 VAC one minute duration.

INSULATION RESISTANCE

2000 Megohms.

Mechanical**SWITCHING MECHANISM**

Snap-action contacts with a minimum of bouncing and optimum self cleaning.

CONTACT ASSEMBLY

th4 & th5 1 NO and/or 1 NC contact per contact block. Up to four contact blocks can be assembled.

th25 1 NO and/or 1 NC or 2 NO and/or 2NC contacts per block. Up to two contact blocks can be assembled.

LIFE-MECHANICAL

2,000,000 switching operations.

ACTUATING FORCE

Approximately 30 grams.

CHANGE OVER MECHANISM

From maintained to momentary.

Electrical**SWITCHING CAPACITY**

250V AC/5A (cos w 0.7).

DC LOAD

(resistive load)

12V/5A, 24V/4A, 36V/3A, 48V/2A, 60V/1.5A,

125V/0.5A, 250V/0.3A.

(Inductive load L/R = 15 ms)

12V/3A, 24V/2A, 36V/1.7A, 48V/1.5A, 60V/1.2A,

125V/0.3A, 250V/0.2A.

LIFE

Approx. 70,000 switching operations at 5 amps, 250VAC (cos w 0.7).

LAMPS th4

Telephone lamps with plug-in socket T 5.5

(incandescent lamps, neon bulbs, LED's).

LAMPS th5 AND th25

Midget-grooved lamps T 1¼ (incandescent lamps, LED's, and neon bulbs).

CONTACT RESISTANCE

Gold contacts ≤ 20 mΩ.

Silver contacts ≤ 50 mΩ.

Subject to change without notice.