























































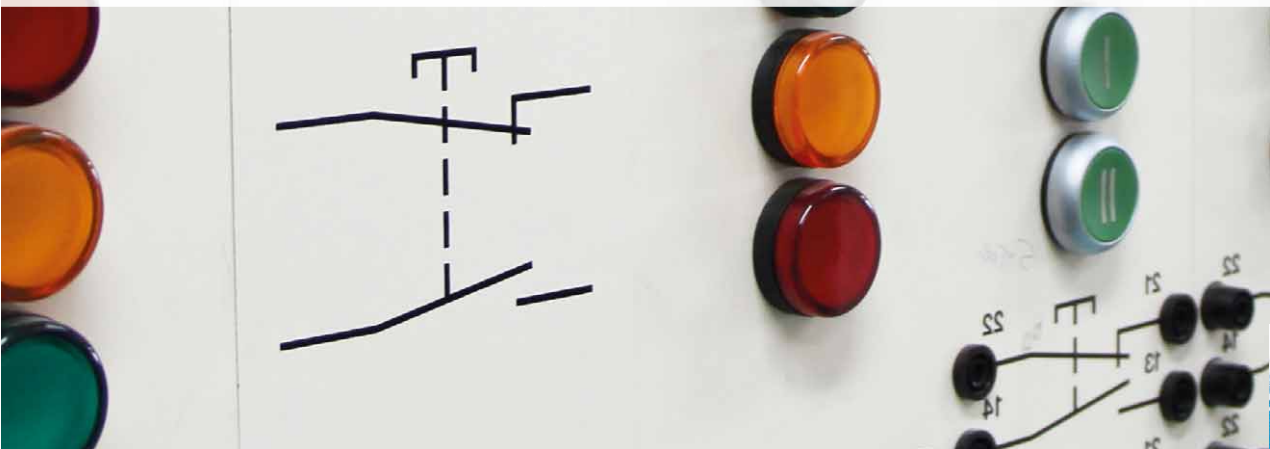


## Pictograms of the table head

<b>U<sub>m</sub></b>  Nominal control voltage	<b>P<sub>n</sub></b>  Rated power	 Rated power	 Notes, additions
<b>U<sub>pr</sub></b>  Primary voltage	<b>U<sub>sec</sub></b>  Secondary voltage	<b>I<sub>sec</sub></b>  Secondary current	<b>P<sub>sec</sub></b>  Secondary power values
 Two position	 Three position	 Key takeout position (left)	 Key takeout position (left and right)
 Key takeout position (middle)	 Key takeout position	 Releasing: by turning	 Releasing: with key
 Electric data of contacts	 Light (LED) units	 REL-ON	 REL-ON
 Tighten torque	 Thread	 Dimension	 Tape of socket
 Basis type	 With enclosure IP 44	 Quick-connecting terminals	 Cable glands
 Weight	 Sound signal	<b>IP..</b>  Protection degree	 Colour
		 Protection degree from the front side	

## Pictograms of the technical data

<b>230/400 V AC</b>  Rated voltage (V)	<b>U<sub>m</sub></b> max. 400 V  Nominal control voltage	 Rated insulation voltage	<b>U<sub>imp</sub></b> 6 kV  Rated impulse withstand voltage
<b>I<sub>e</sub></b> (AC 1,28 V) 15 A  Nominal operational current	<b>50/60 Hz</b>  Rated frequency	 Suggested backup fuse	<b>[mm<sup>2</sup>]</b> 0,5-2,5  Connectable cable
 The operator heads can be turned in 90° steps!	 The operator heads can be turned in 90° steps, the arm in 180° steps!	<b>F<sub>on</sub></b> max. 20 N  Switching on force	<b>F<sub>off</sub></b> max. 15 N  Switching off force
 Mechanical life	<b>E</b> +120 °C  Heat-proof category	 Protection class: I.	<b>ON-OFF-ON...</b> sc/h x3.600  Switching frequency (C-O cycles/hour)
<b>IP 42</b>  Protection degree (installed, from the front side)	<b>IP 20</b>  Protection of terminals (basic)	<b>IP 55</b>  Protection degree	 Vibration resistance
 Relativ humidity	<b>T<sub>a</sub></b> -25...+55 °C  Ambient temperature	 Cutting size	





LS15 limit switches 2



LS7 limit switches 5



LSME limit switches 8



VP limit switches 12



VT limit switches 16



VM limit switches 20



KW limit switches (micro switches) 24



Pushbuttons, basic 26



Pushbuttons, protruding 26



Pushbuttons with light 27



Pushbuttons with signal 28



Pushbuttons with mushroom head 29



Double ON-OFF switches 30



Knob switches 30



Knob handle switches with light 31



Key switches 31



Contact units 32



Protection covers 32



Accessories 34



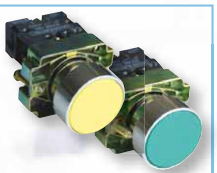
Voltage meter, Ammeter, Buzzer 34



LED Warning Lamp Vertical Base 35



LJL type LED signal lamps 36



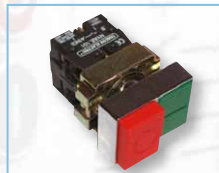
Simple pushbuttons 37



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Key switches 43



Normal signal bulbs 44



Contact elements 44



Enclosures 45



Relay safety switches 46



TES device switches 48



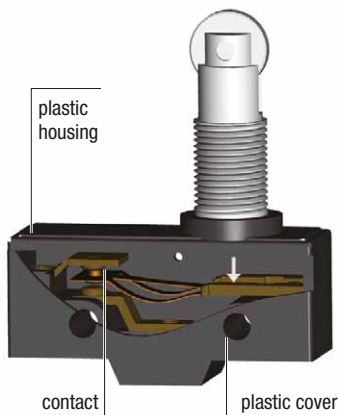
One phase isolating transformers TVTR 52



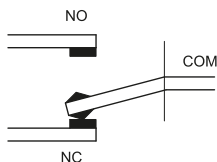
One phase isolating safety transformers TVTRB 54

## LS15 limit switches

<b>I<sub>th</sub></b> 15 A	<b>I<sub>e</sub></b> (AC 1, 230 V) 5 A	<b>I<sub>e</sub></b> (AC 15, 230 V) 2 A	<b>I<sub>e</sub></b> (DC 15, 250 V) 0,3 A	<b>U<sub>i</sub></b> 500 V	<b>[mm<sup>2</sup>]</b> 0,5-1,5	<b>×10<sup>6</sup></b> x1.800	<b>ON-OFF-ON...</b> sc/h	<b>T<sub>a</sub></b> -25...+55°C	<b>IP</b> 00
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Type of contact: C

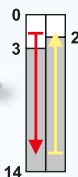


RELEVANT STANDARD  
**EN 60947-1**

RELEVANT STANDARD  
**EN 60947-5-1**

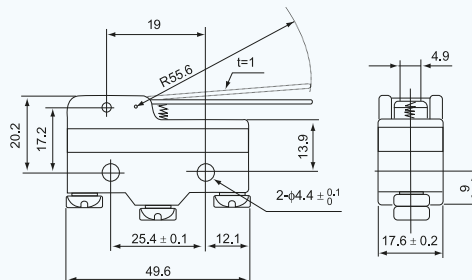
- Strong housing
- Changeover contact
- Contact point for ring terminals
- Easy wire connection
- With different type switching mechanism

Version with spring handle

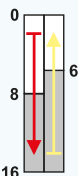


Operating distance (mm)

**TRACON** LS15GM-B

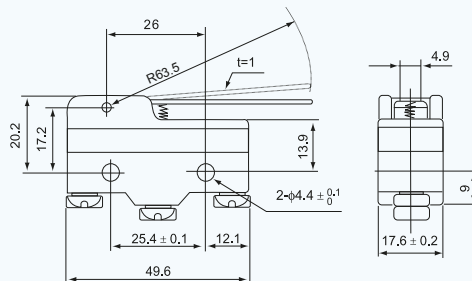


Version with spring handle

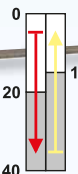


Operating distance (mm)

**TRACON** LS15GW-B

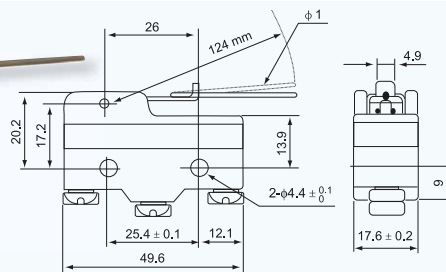


Version with spring handle

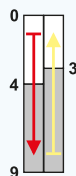


Operating distance (mm)

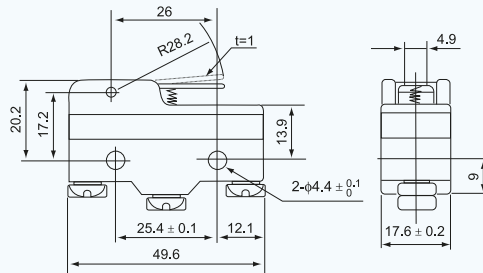
**TRACON** LS15HW24-B



## Version with spring handle

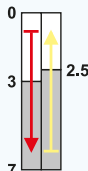


Operating distance (mm)

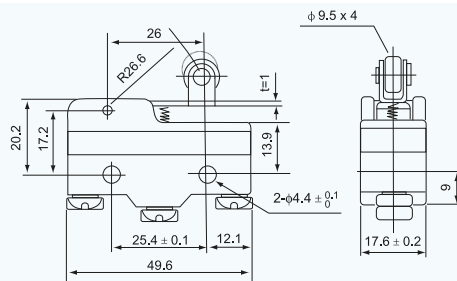


**TRACON** LS15GW21-B

## Version with spring handle and roll

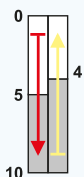


Operating distance (mm)

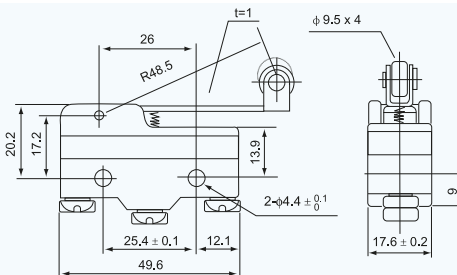


**TRACON** LS15GW22-B

## Version with spring handle and roll

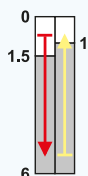


Operating distance (mm)

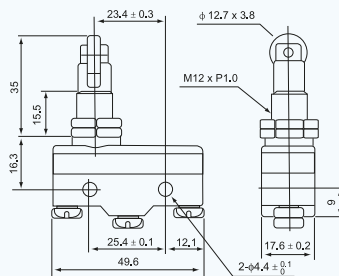


**TRACON** LS15GW2-B

## Version with roll

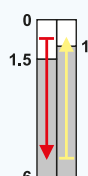


Operating distance (mm)

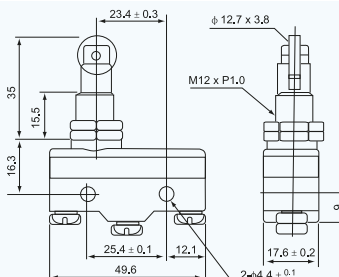


**TRACON**  
LS15GQ21-B

## Version with roll



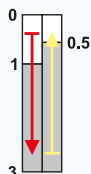
Operating distance (mm)



**TRACON**  
LS15GQ22-B

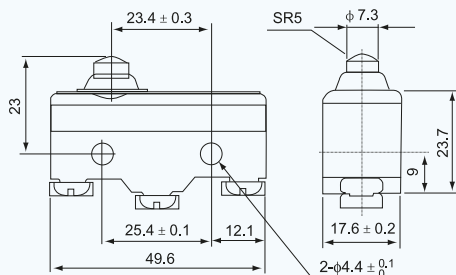


Version with cone bumper

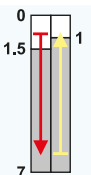


Operating distance (mm)

TRACON LS15GD-B

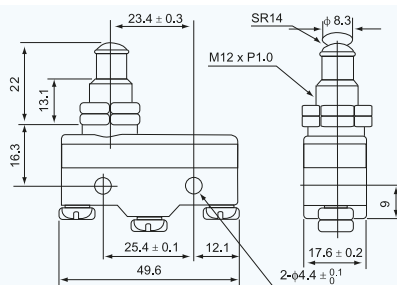


Version with cone bumper

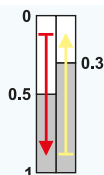


Operating distance (mm)

TRACON LS15GQ-B

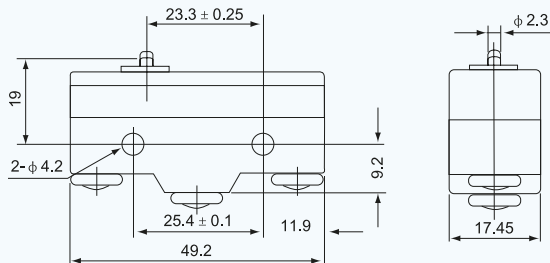


Version with bumper



Operating distance (mm)

TRACON LS15G-B



Cover for LS15 limit switch



IP 40



TRACON LS15-C0V



# RELAYS



## LS7 limit switches

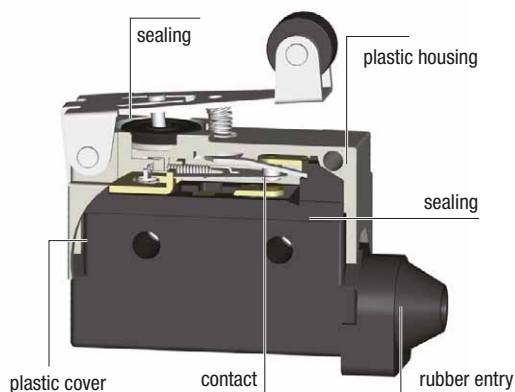
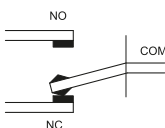
<b>I<sub>th</sub></b> 10 A	<b>I<sub>e</sub></b> (AC 1, 230 V) 5 A	<b>I<sub>e</sub></b> (AC 15, 230 V) 2 A	<b>I<sub>e</sub></b> (DC 13, 250 V) 0,3 A	<b>U<sub>i</sub></b> 500 V	<b>[mm<sup>2</sup>]</b> 0,5-1,5	<b>⌘</b> ×10 <sup>6</sup>	<b>ON-OFF-ON... sc/h</b> ×1.800	<b>T<sub>a</sub></b> -25...+55°C	<b>IP</b> 40	<b>Pictograms</b>	<b>K/0</b>
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**RELEVANT STANDARD**  
**EN 60947-1**

**RELEVANT STANDARD**  
**EN 60947-5-1**

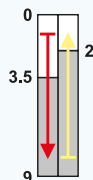


**Type of contact: C**

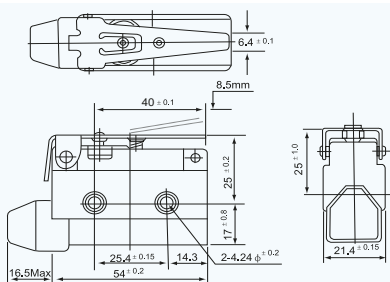


- Strong housing
- Changeover contact
- Contact point for ring terminals
- Easy wire connection
- With different type switching mechanism

### Version with spring handle

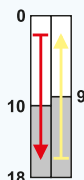


**Operating distance (mm)**

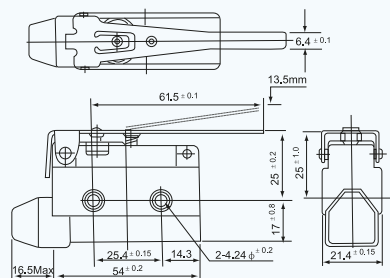


**TRACON LS7140**

### Version with spring handle

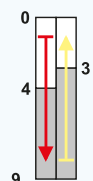


**Operating distance (mm)**

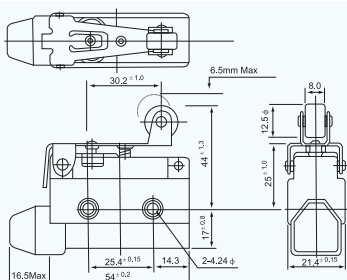


**TRACON LS7120**

### Version with spring handle and roll

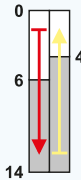


**Operating distance (mm)**



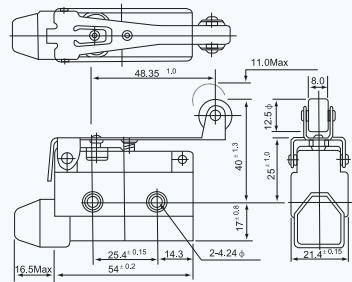
**TRACON LS7141**

Version with spring handle and roll

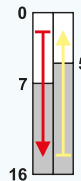


Operating distance (mm)

**TRACON** LS7121

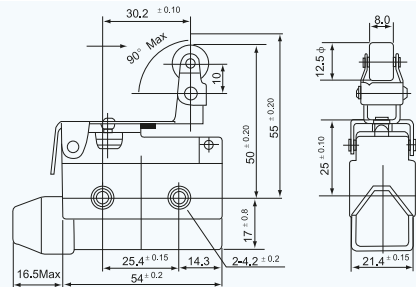


Version with spring handle and jointed roll

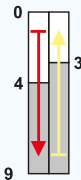


Operating distance (mm)

**TRACON** LS7144

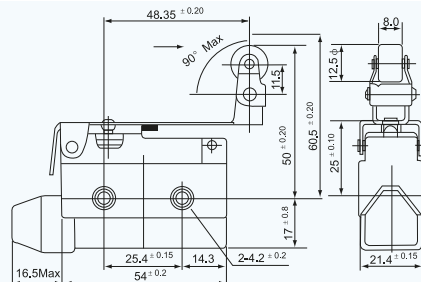


Version with spring handle and jointed roll

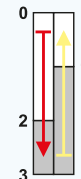


Operating distance (mm)

**TRACON** LS7124

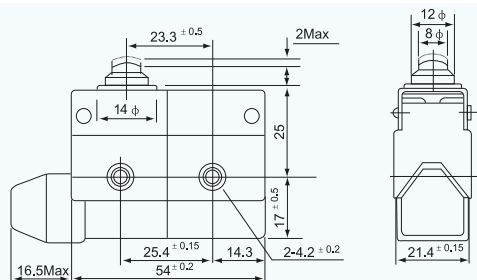


Version with cone bumper

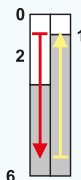


Operating distance (mm)

**TRACON** LS7100

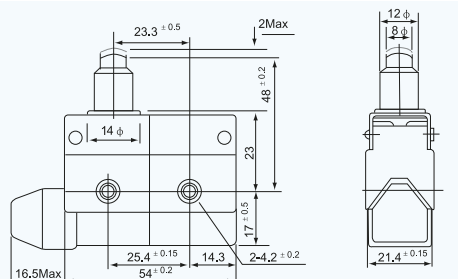


Version with cone bumper

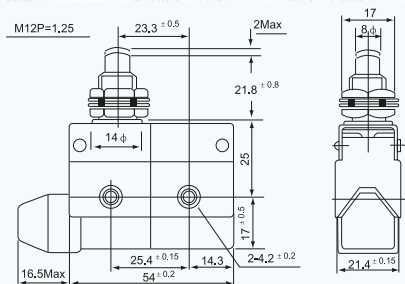
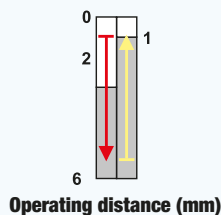


Operating distance (mm)

**TRACON** LS7110

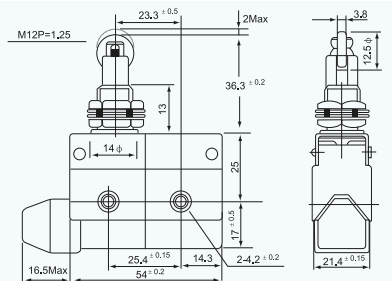
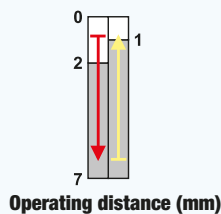


## Version with cone bumper



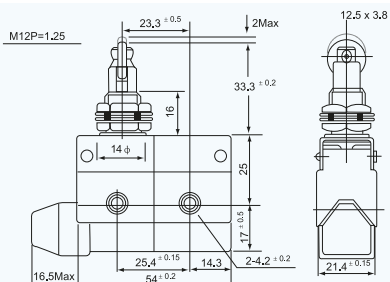
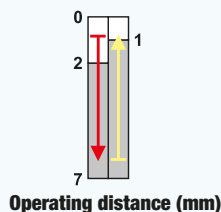
**TRACON** LS7310

## Version with roll



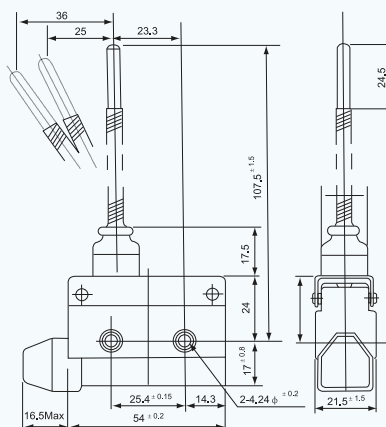
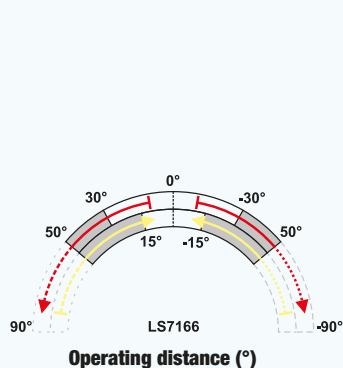
**TRACON** LS7311

## Version with roll



**TRACON** LS7312

## Version with spring stick

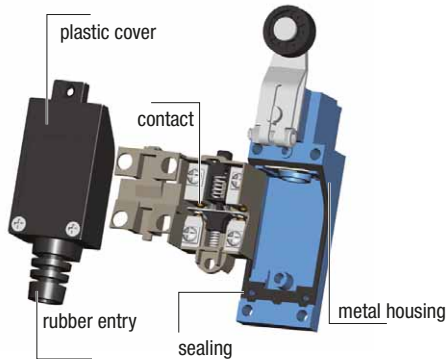
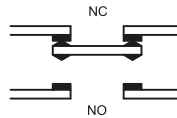


**TRACON** LS7166



## LSME limit switches

<b>I<sub>th</sub></b> 10 A	<b>I<sub>e</sub></b> (AC 1, 230 V) 5 A	<b>I<sub>e</sub></b> (AC 15, 230 V) 2 A	<b>I<sub>e</sub></b> (DC 13, 230 V) 0,3 A	<b>U<sub>i</sub></b> 500 V	<b>mm<sup>2</sup></b> 0,5-1,5	<b>×10<sup>6</sup></b> x1.800	<b>ON-OFF-ON...</b> sc/h x1.800	<b>T<sub>a</sub></b> -25...+55°C	<b>IP</b> 65
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Type of contact: **Za**

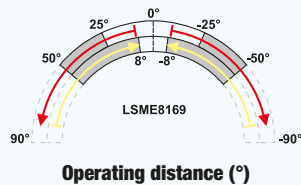
RELEVANT STANDARD  
**EN 60947-1**

RELEVANT STANDARD  
**EN 60947-5-1**

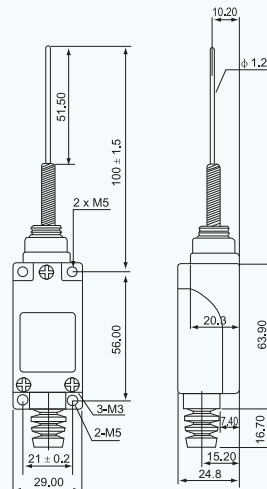
- double contacts
- massive construction
- plastic and aluminum die-cast
- water- and oilproof

- double spring mechanism
- long lifetime
- easy wiring

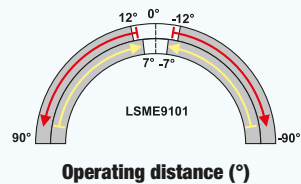
## Version with spring stick



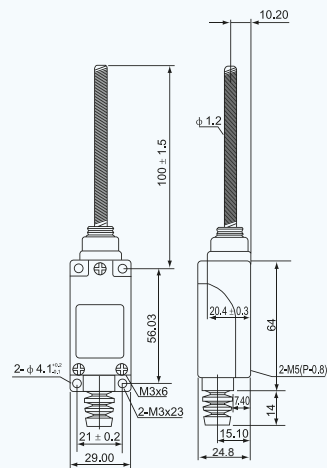
**TRACON** LSME8169



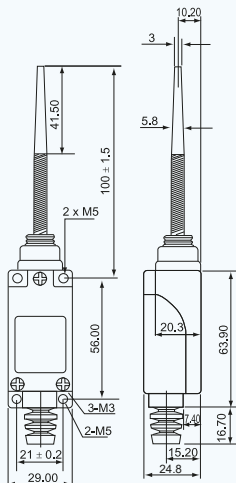
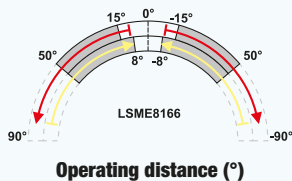
## Version with spring stick



**TRACON** LSME9101

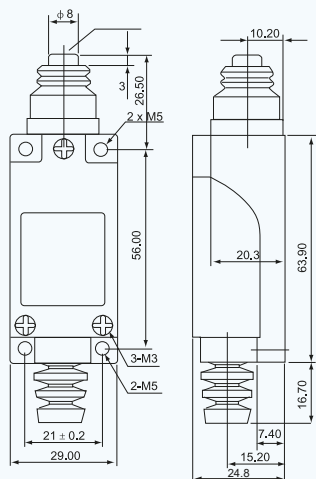
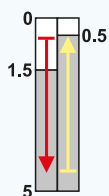


## Version with spring stick



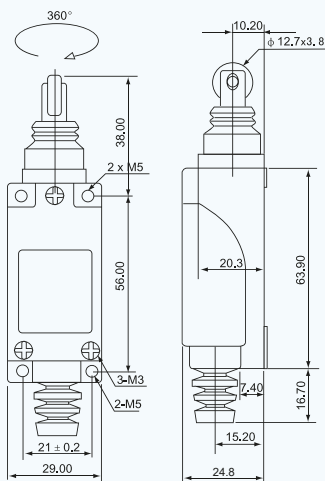
**TRACON** LSME8166

## Version with cone bumper



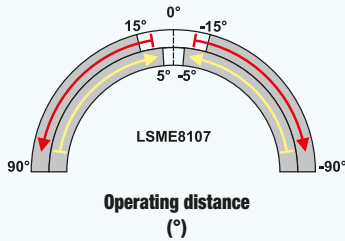
**TRACON** LSME8111

## Version with roll

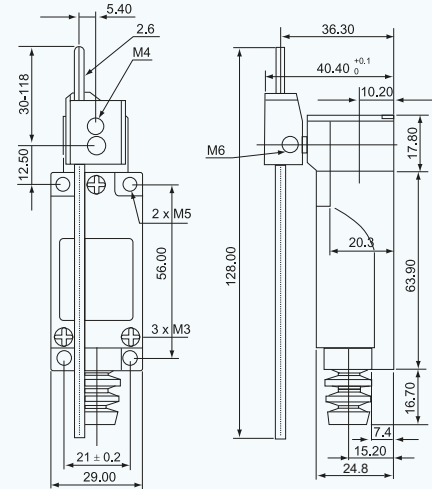


**TRACON** LSME8122

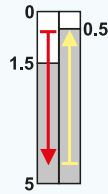
## Version with twisting arm and stick



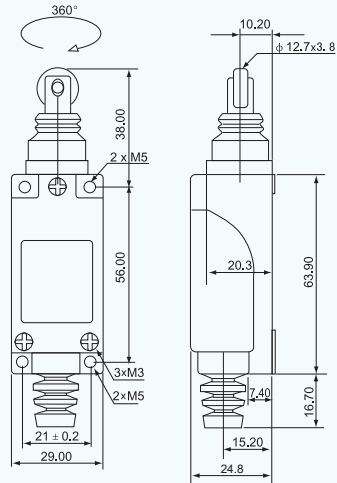
**TRACON** LSME8107



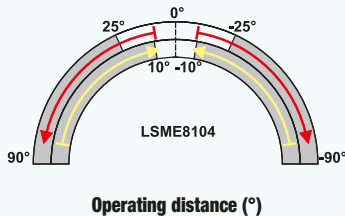
## Version with roller bumper



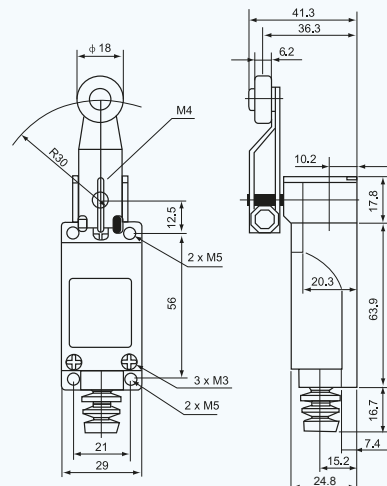
**TRACON** LSME8112



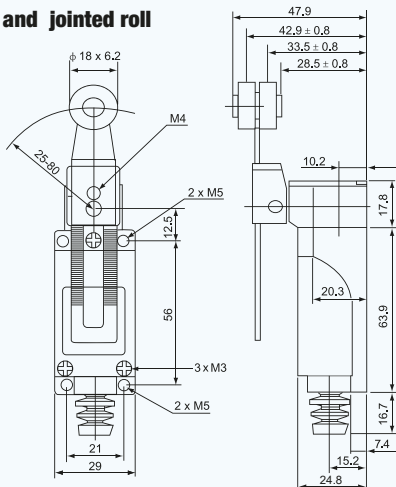
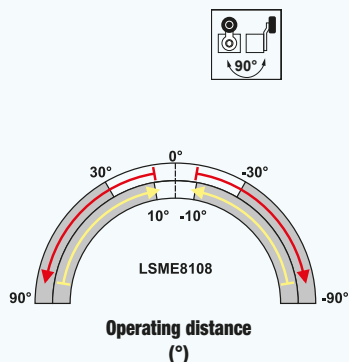
## Version with twisting arm and roll



**TRACON** LSME8104



Version with adjustable spring handle and jointed roll



TRACON LSME8108

STL...

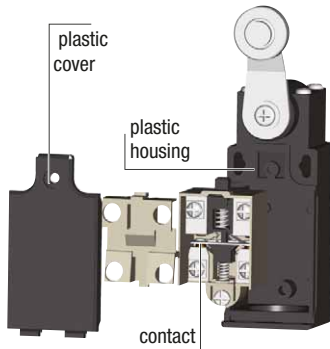


LED  
HAND LAMPS

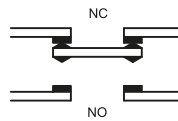


## VP limit switches

<b>I<sub>th</sub></b> 10 A	<b>I<sub>e</sub></b> (AC 1, 230 V) 5 A	<b>I<sub>e</sub></b> (AC 15, 230 V) 2 A	<b>I<sub>e</sub></b> (DC 13, 250 V) 0,3 A	<b>U<sub>i</sub></b> 500 V	<b>[mm<sup>2</sup>]</b> 0,75-1,5	<b>5×10<sup>6</sup></b>	<b>ON-OFF-ON...</b> sc/h ×1.800	<b>T<sub>a</sub></b> -25...+55°C	<b>IP</b> 65
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## Type of contact: Za

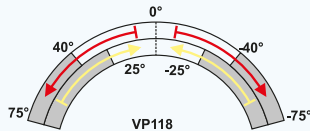
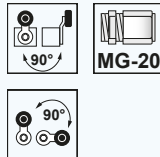


- double contacts
- strong plastic cover
- massive construction
- precise switching
- long lifetime
- easy wiring

RELEVANT STANDARD  
**EN 60947-5-1**

RELEVANT STANDARD  
**EN 60947-1**

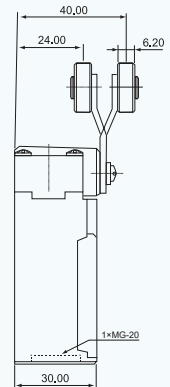
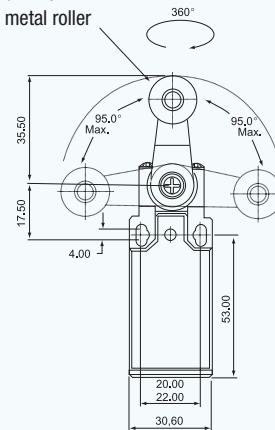
## Version with twisting arm



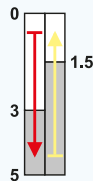
Operating distance (°)

**TRACON VP118**

d = 18 mm  
metal roller



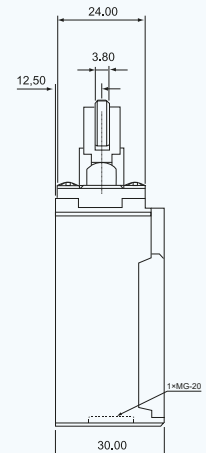
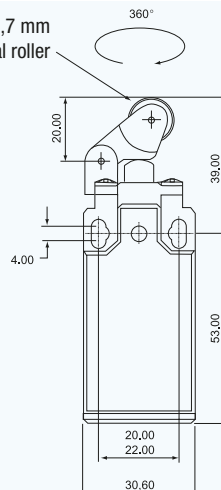
## Version with twisting arm



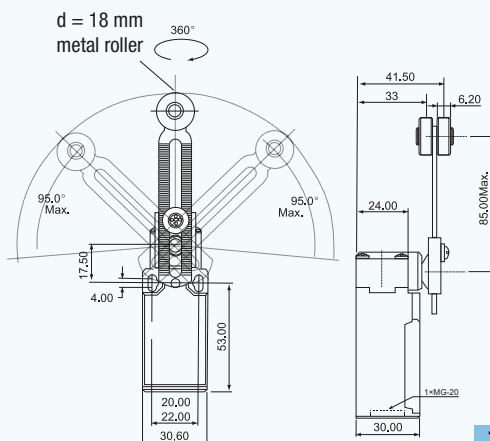
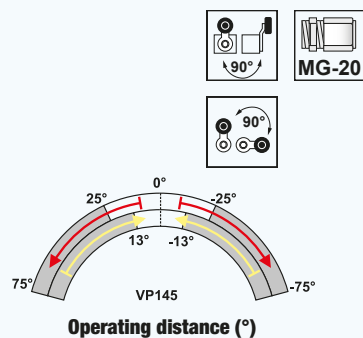
Operating distance (mm)

**TRACON VP121**

d = 12,7 mm  
metal roller

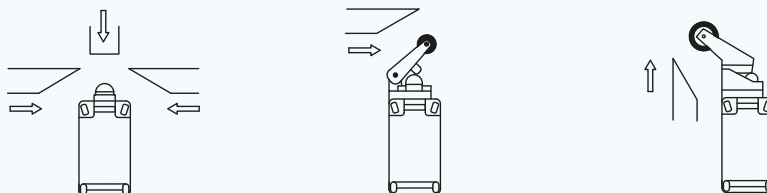


Version with adjustable rolling arm



TRACON VP145

Operation directions



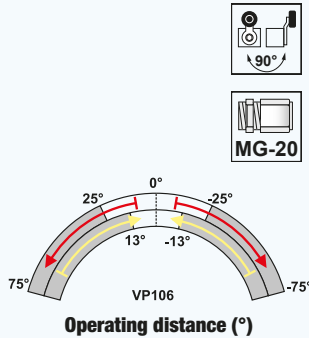
# TGE

## DISTRIBUTION BOXES

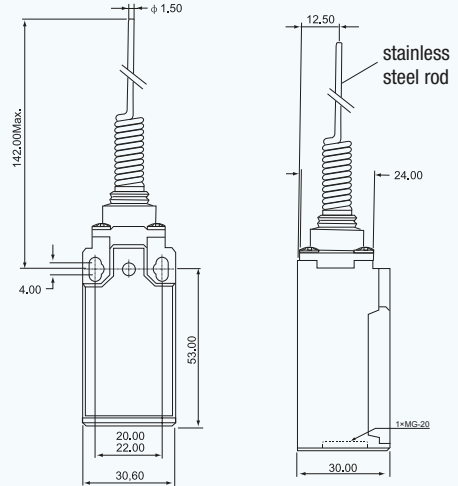
TRACON  
ELECTRIC®



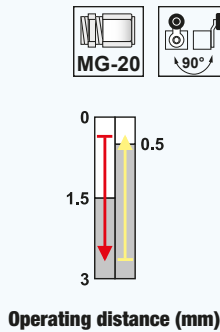
Version with spring stick



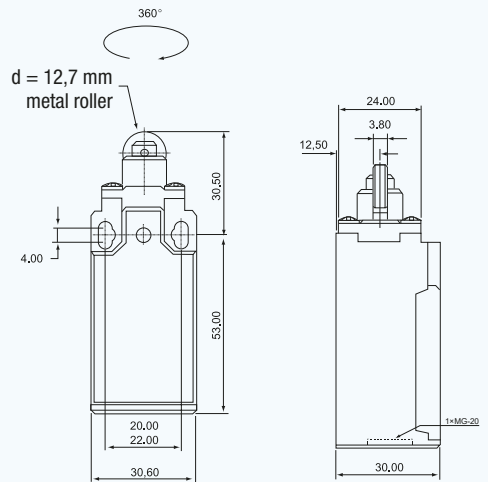
TRACON VP106



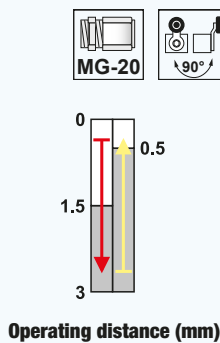
Version with roller bumper



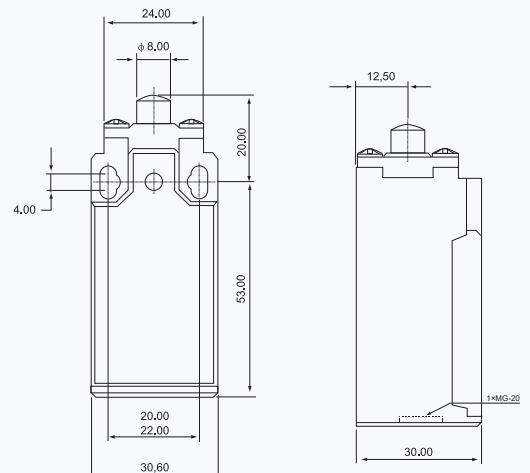
TRACON VP102



Version with cone bumper

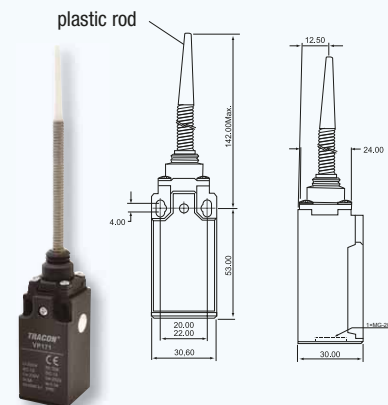


TRACON VP110

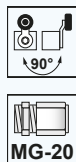


## Version with twisting arm

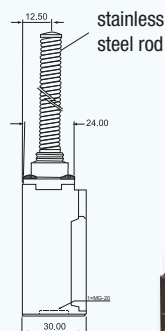
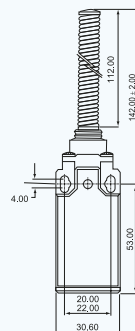
## Version with roller bumper



**TRACON VP171**

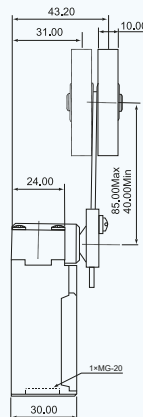
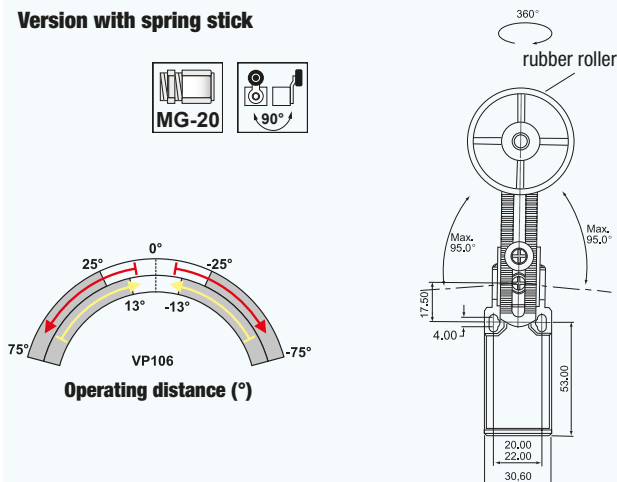


**Operating distance (mm)**



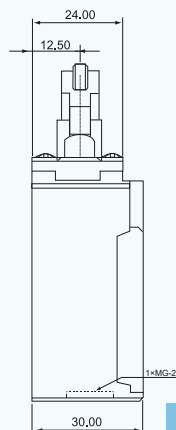
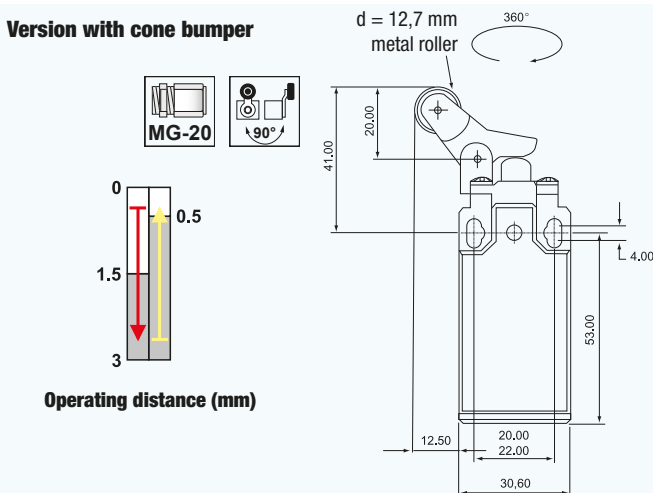
**TRACON VP181**

## Version with spring stick



**TRACON VP191**

## Version with cone bumper

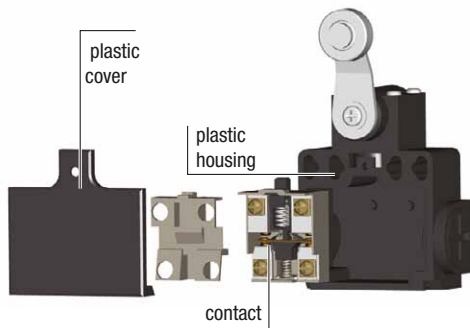
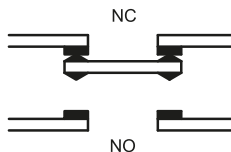


**TRACON VP127**



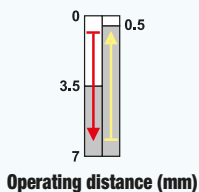
## VT limit switches

<b>I<sub>th</sub></b> 10 A	<b>I<sub>e</sub></b> (AC 1, 230 V) 5 A	<b>I<sub>e</sub></b> (AC 15, 230 V) 2 A	<b>I<sub>e</sub></b> (DC 15, 230 V) 0,3 A	<b>U<sub>i</sub></b> 500 V	<b>(mm<sup>2</sup>)</b> 0,75-1,5	<b>ON-OFF-ON...</b> sc/h ×1.800	<b>T<sub>a</sub></b> -25...+55°C	<b>IP</b> 65
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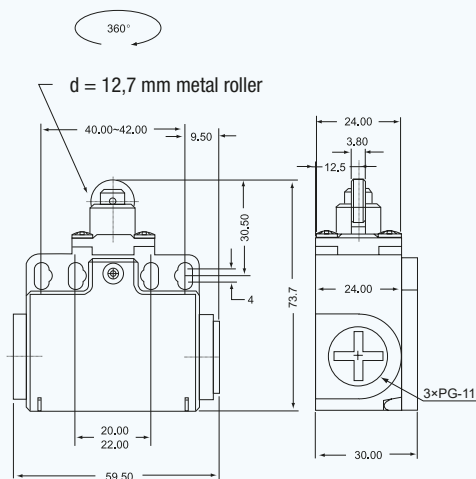
Type of contact: **Za**
**RELEVANT STANDARD**  
**EN 60947-1**
**RELEVANT STANDARD**  
**EN 60947-5-1**

- double contacts
- strong plastic cover
- massive construction
- precise switching
- long lifetime

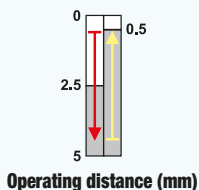
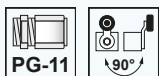
## Version with roller bumper



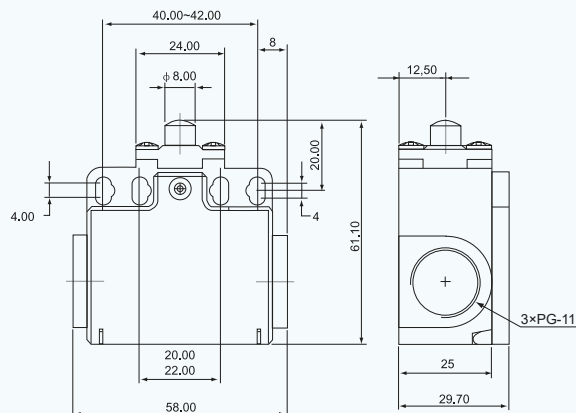
Operating distance (mm)

**TRACON** **VT102**


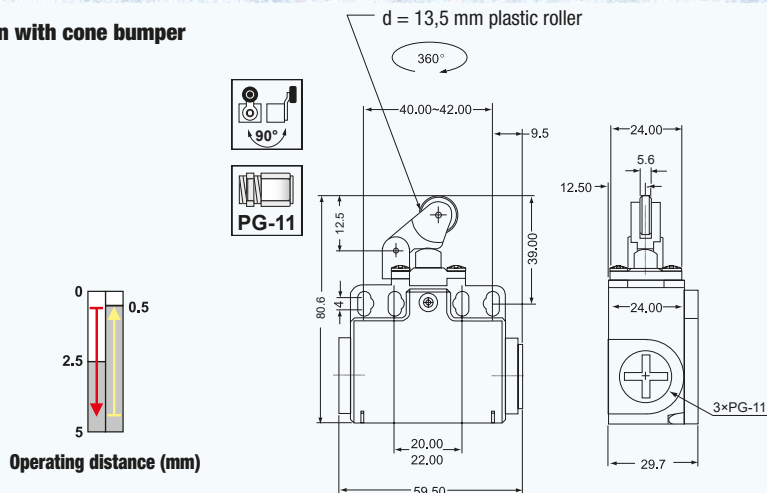
## Version with cone bumper



Operating distance (mm)

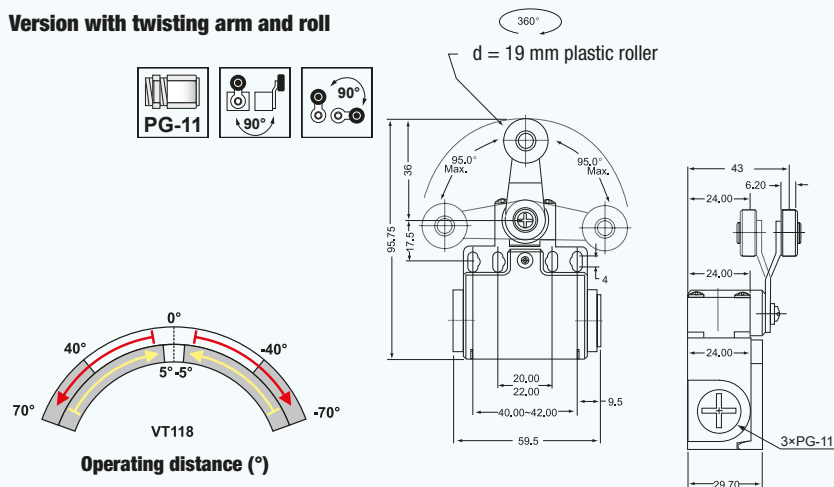
**TRACON** **VT110**


## Version with cone bumper



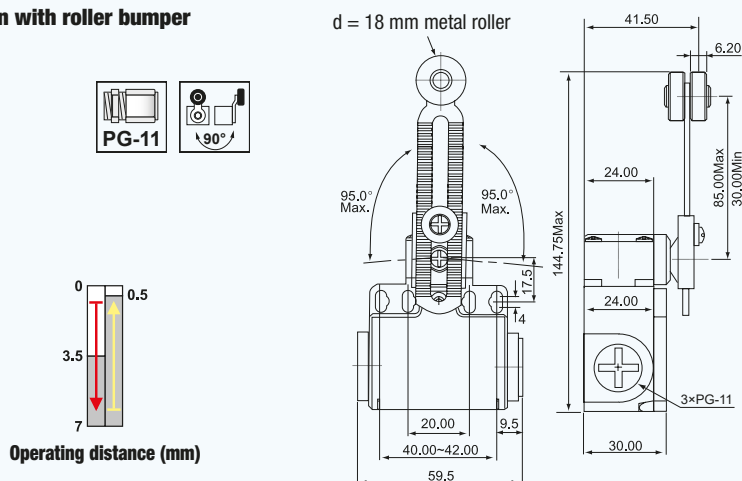
**TRACON** VT121

## Version with twisting arm and roll



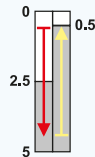
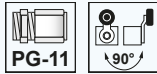
**TRACON** VT118

## Version with roller bumper



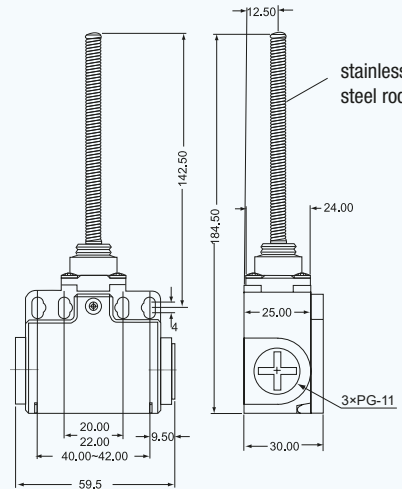
**TRACON** VT145

## Version with cone bumper

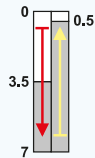


Operating distance (mm)

TRACON VT181

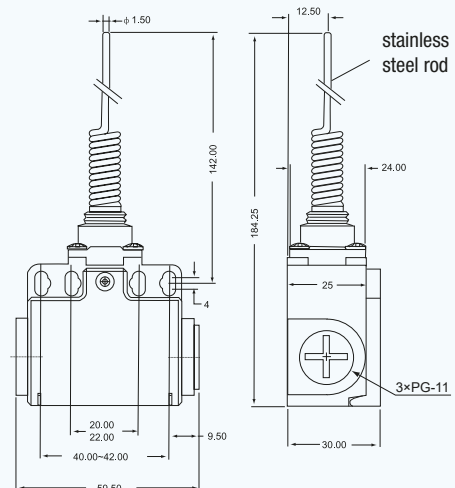


## Version with roller bumper

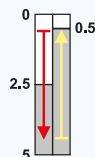


Operating distance (mm)

TRACON VT106

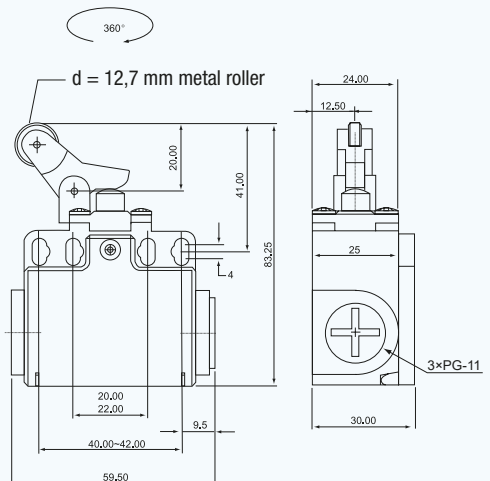


## Version with cone bumper

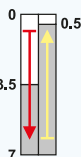


Operating distance (mm)

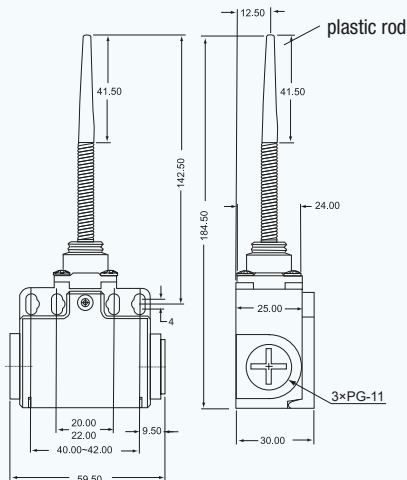
TRACON VT127



Version with roller bumper

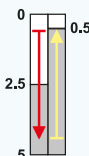


Operating distance (mm)

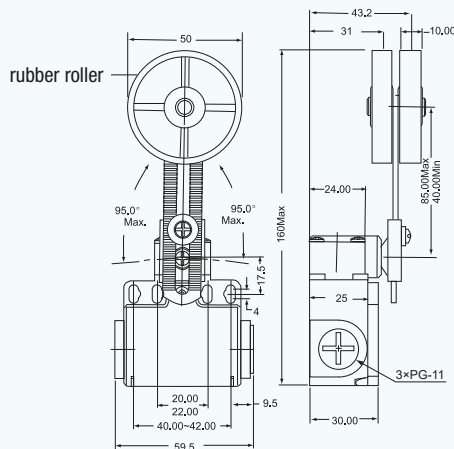


TRACON VT171

Version with cone bumper



Operating distance (mm)



TRACON VT191

# MP

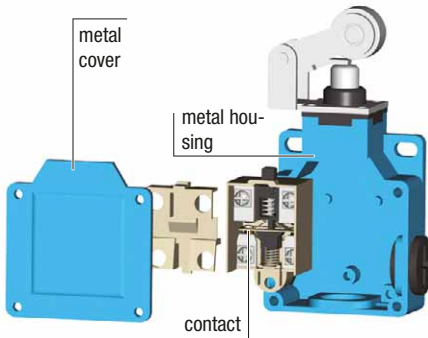
## METER AND MARKING SEALS





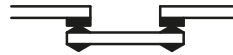
## VM limit switches

<b>I<sub>th</sub></b> 10 A	<b>I<sub>e</sub></b> (AC 1, 230 V) 5 A	<b>I<sub>e</sub></b> (AC 15, 230 V) 2 A	<b>I<sub>e</sub></b> (DC 13, 250 V) 0,3 A	<b>U<sub>i</sub></b> 500 V	<b>[mm<sup>2</sup>]</b> 0,75-1,5	<b>5×10<sup>6</sup></b>	<b>ON-OFF-ON...</b> sc/h ×3.600	<b>T<sub>a</sub></b> -25...+55°C	<b>IP</b> 66	
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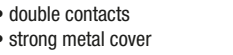


## Type of contact: Za

NC



NO

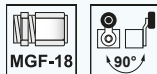


- double contacts
- strong metal cover
- massive construction
- water- and oilproof
- long lifetime
- easy wiring

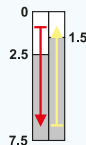
RELEVANT STANDARD  
**EN 60947-1**

RELEVANT STANDARD  
**EN 60947-5-1**

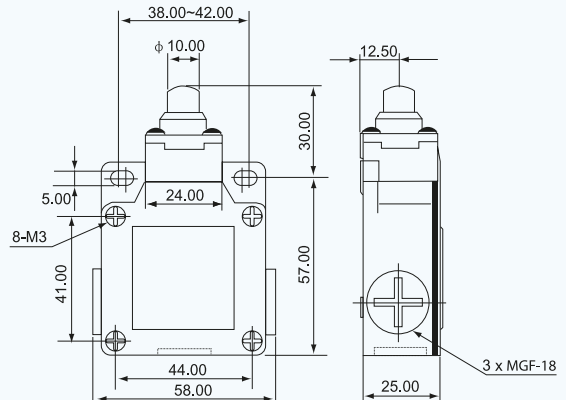
## Version with cone bumper



Operating distance (mm)



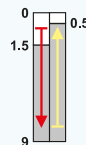
**TRACON** VM110



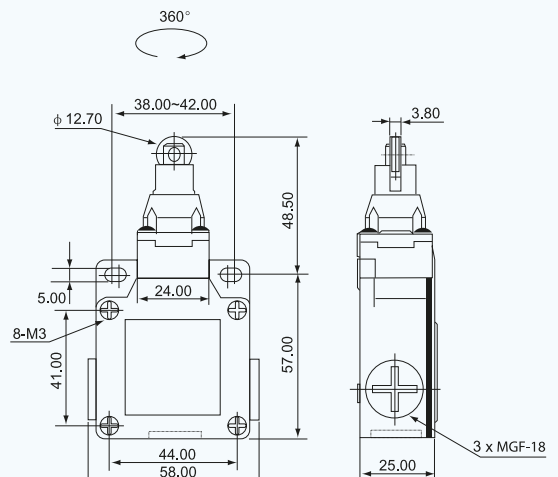
## Version with roller bumper



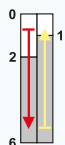
Operating distance (mm)



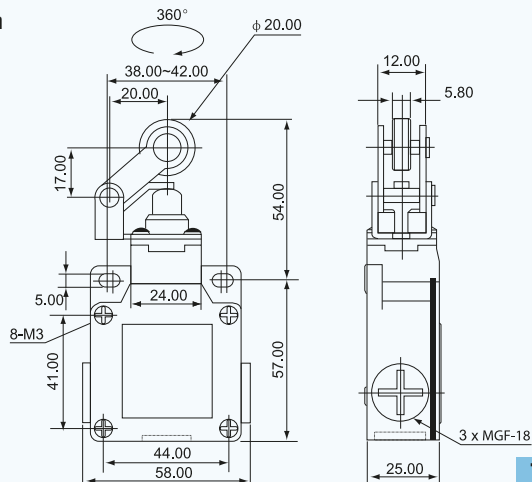
**TRACON** VM102



## Version with roller bumper on arm

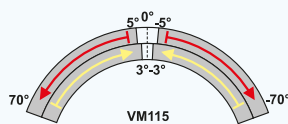
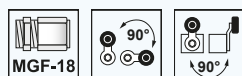


Operating distance (mm)

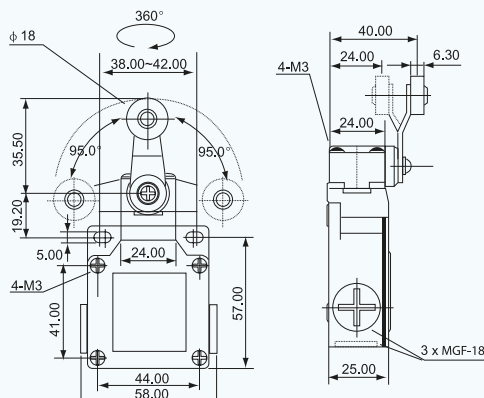


**TRACON VM121**

## Version with twisting arm

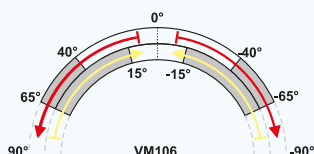


Operating distance (°)

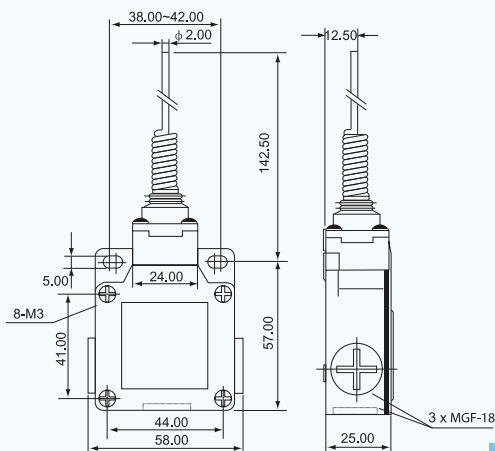


**TRACON VM115**

## Version with spring stick

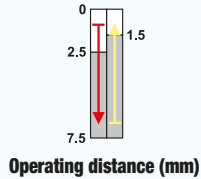
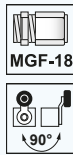


Operating distance (°)

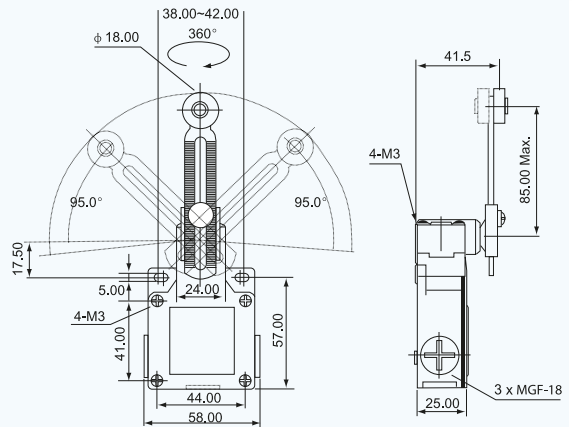


**TRACON VM106**

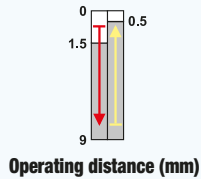
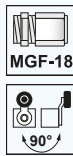
## Version with cone bumper



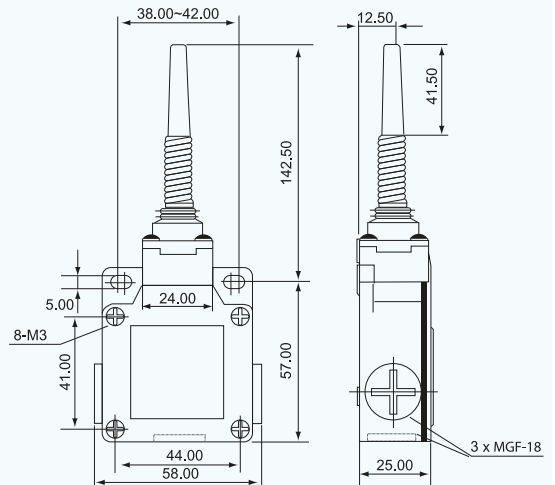
**TRACON** VM145



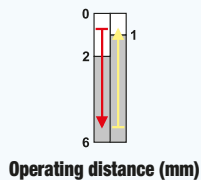
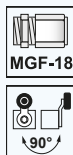
## Version with roller bumper



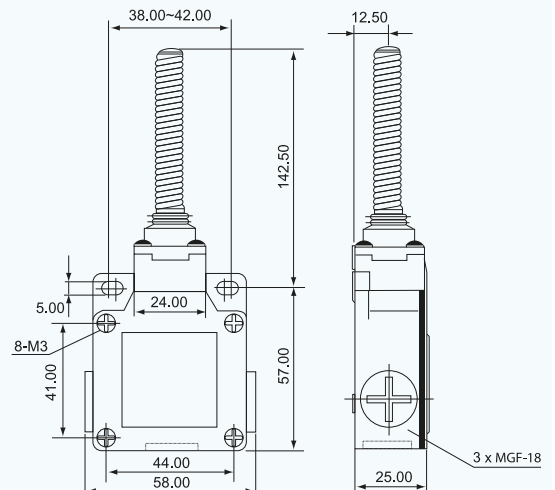
**TRACON** VM171



## Version with roller bumper on arm



**TRACON** VM181





TRACON  
HARMONY

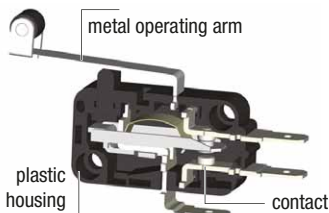
## CHRISTMAS DECORATION



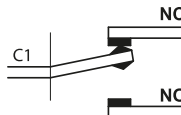


## KW limit switches (micro switches)

<b>I<sub>th</sub></b> 10 A	<b>I<sub>e</sub></b> (AC 1, 230 V) 5 A	<b>I<sub>e</sub></b> (AC 15, 230 V) 2 A	<b>I<sub>e</sub></b> (DC 15, 250 V) 0,3 A	<b>U<sub>i</sub></b> 500 V	<b>mm<sup>2</sup></b> 0,75-1,5	<b>×10<sup>6</sup></b> ON-OFF-ON... sc/h ×600	<b>T<sub>a</sub></b> -25...+80°C	<b>IP</b> 00
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Type of contact: C

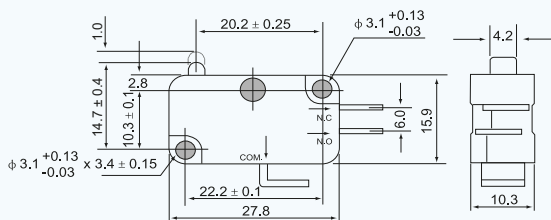
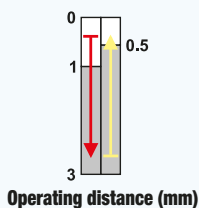

**RELEVANT STANDARD**  
**EN 60947-1**
**RELEVANT STANDARD**  
**EN 60947-5-1**

## Version with bumper



TRACON

<b>KW3-01</b>	6,3×0,8 mm
<b>KW3-05</b>	4,8×0,5 mm

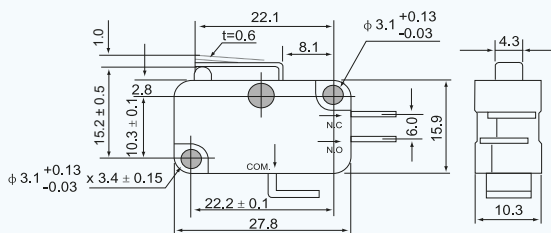
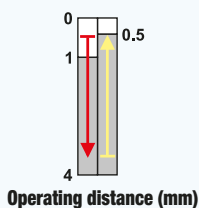


## Version with spring handle

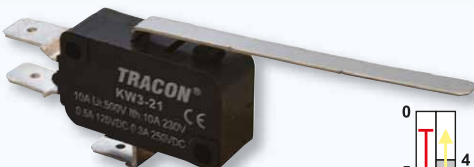


TRACON

<b>KW3-11</b>	6,3×0,8 mm
<b>KW3-15</b>	4,8×0,5 mm

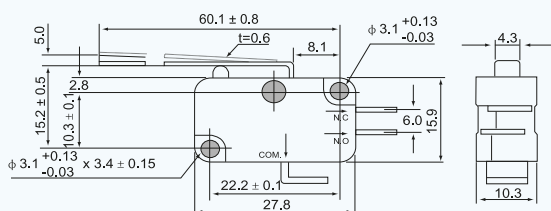
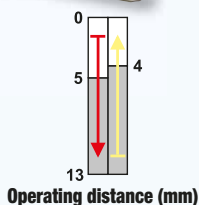


## Version with spring handle



TRACON

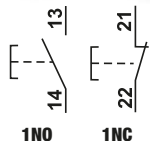
<b>KW3-21</b>	6,3×0,8 mm
<b>KW3-25</b>	4,8×0,5 mm














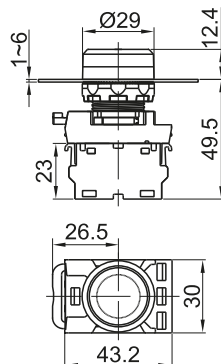


## Pushbuttons, basic

$I_e$ (AC 1, 230 V) <b>6 A</b>	$I_e$ (AC 15, 230 V) <b>3 A</b>	$I_e$ (DC 13, 250 V) <b>0,27 A</b>	$U_i$ <b>660 V</b>	$[mm^2]$ <b>0,5-2,5</b>	$\times 10^6$ <b><math>\times 10^6</math></b>	$F_{on}$ <b>max. 20 N</b>	$T_a$ <b>-25...+40°C</b>	
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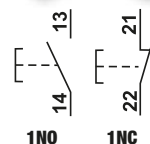











TRACON				
	IP 65			 NC  NO
NYG3-BK		page K/32	1 × NO	
NYG3-G			1 × NO	
NYG3-W			1 × NO	
NYG3-Y			1 × NO	
NYG3-B			1 × NO	
NYG3-R			1 × NC	
RELEVANT STANDARD EN 60947-1			RELEVANT STANDARD EN 60947-5-1	

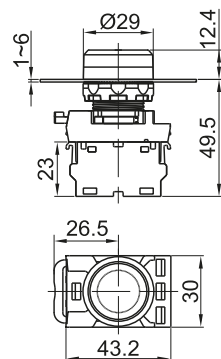


## Push-switches, basic

$I_e$ (AC 1, 230 V) <b>6 A</b>	$I_e$ (AC 15, 230 V) <b>3 A</b>	$I_e$ (DC 13, 250 V) <b>0,27 A</b>	$U_i$ <b>660 V</b>	$[mm^2]$ <b>0,5-2,5</b>	$\times 10^6$ <b><math>\times 10^6</math></b>	$F_{on}$ <b>max. 20 N</b>	$F_{off}$ <b>max. 15 N</b>	$T_a$ <b>-25...+40°C</b>	
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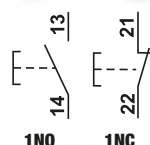













TRACON			
	IP 65		
<b>NYK3-BK</b>		page K/32	1 × NO
<b>NYK3-G</b>			1 × NO
<b>NYK3-W</b>			1 × NO
<b>NYK3-Y</b>			1 × NO
<b>NYK3-B</b>			1 × NO
<b>NYK3-R</b>			1 × NC
RELEVANT STANDARD EN 60947-1		RELEVANT STANDARD EN 60947-5-1	

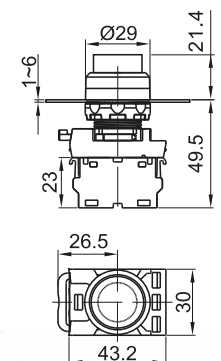


## Pushbuttons, protruding

$I_e$ (AC 1, 230 V) <b>6 A</b>	$I_e$ (AC 15, 230 V) <b>3 A</b>	$I_e$ (DC 13, 250 V) <b>0,27 A</b>	$U_i$ <b>660 V</b>	$[mm^2]$ <b>0,5-2,5</b>	$\times 10^6$ <b><math>\times 10^6</math></b>	$F_{on}$ <b>max. 20 N</b>	$T_a$ <b>-25...+40°C</b>	
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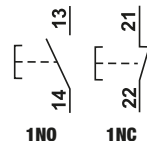
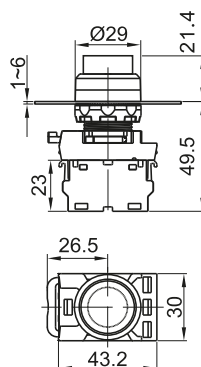
TRACON			
			 
<b>NYG3-HBK</b>		<b>page K/32</b>	1 × NO
<b>NYG3-HG</b>			1 × NO
<b>NYG3-HW</b>			1 × NO
<b>NYG3-HY</b>			1 × NO
<b>NYG3-HB</b>			1 × NO
<b>NYG3-HR</b>			1 × NC
<b>RELEVANT STANDARD EN 60947-1</b>		<b>RELEVANT STANDARD EN 60947-5-1</b>	



## Push-switches, protruding



TRACON			IP 42		IP42		NC NO	
NYK3-HBK							1 × NO	
NYK3-HG							1 × NO	
NYK3-HW							1 × NO	
NYK3-HY							1 × NO	
NYK3-HB							1 × NO	
NYK3-HR							1 × NC	
RELEVANT STANDARD			EN 60947-1		RELEVANT STANDARD		EN 60947-5-1	

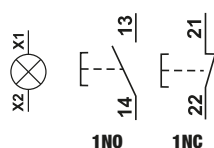
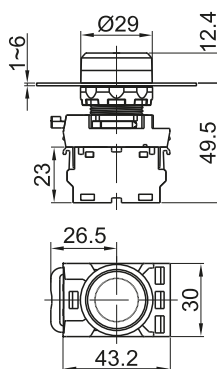


## Pushbuttons with light

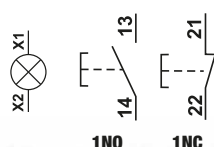
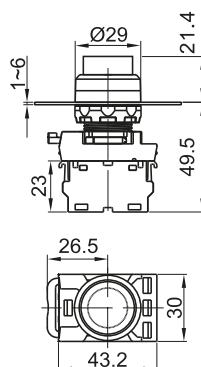


TRACON			IP 65		IP65		NC NO	
NYG3-LG							1 × NO	
NYG3-LW							1 × NO	
NYG3-LY							1 × NO	
NYG3-LB							1 × NO	
NYG3-LR							1 × NC	
NYG3-HLG*							1 × NO	
NYG3-HLW*							1 × NO	
NYG3-HLY*							1 × NO	
NYG3-HLB*							1 × NO	
NYG3-HLR*							1 × NC	
RELEVANT STANDARD			EN 60947-1		RELEVANT STANDARD		EN 60947-5-1	

\* Protruding versions



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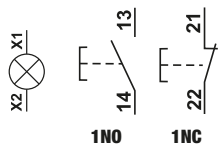




## Push-switches with light



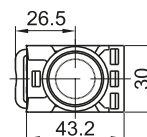
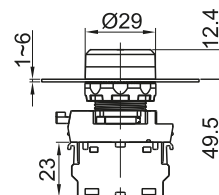
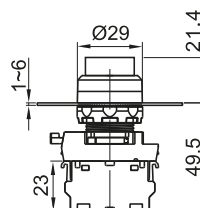
NYK3-L..



NYK3-H..

TRACON		
NYK3-LG		1 × NO
NYK3-LW		1 × NO
NYK3-LY		1 × NO
NYK3-LB		1 × NO
NYK3-LR		1 × NC
NYK3-HLG*		1 × NO
NYK3-HLW*		1 × NO
NYK3-HLY*		1 × NO
NYK3-HLB*		1 × NO
NYK3-HLR*		1 × NC

\* Protruding versions (IP42)

RELEVANT STANDARD  
EN 60947-1RELEVANT STANDARD  
EN 60947-5-1

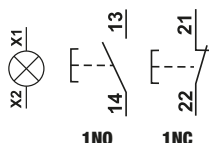
## Pushbuttons with signal



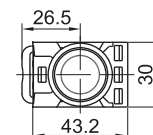
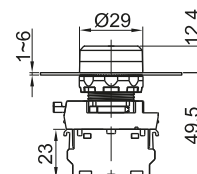
NYG3-P..



NYG3-P..L



TRACON		
NYG3-P1		1 × NO
NYG3-P4		1 × NO
NYG3-P3		1 × NO
NYG3-P2		1 × NC
NYG3-P1L		1 × NO
NYG3-P4L		1 × NO
NYG3-P3L		1 × NO
NYG3-P2L		1 × NC

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# Push-switches with signal

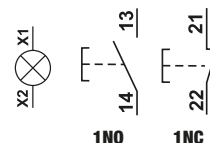
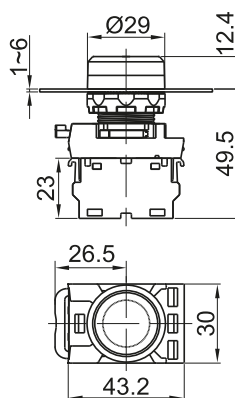


TRACON		
	IP 65	
NYK3-P1		1 × NO
NYK3-P4		1 × NO
NYK3-P3		1 × NO
NYK3-P2		1 × NC
NYK3-P1L		1 × NO
NYK3-P4L		1 × NO
NYK3-P3L		1 × NO
NYK3-P2L		1 × NC

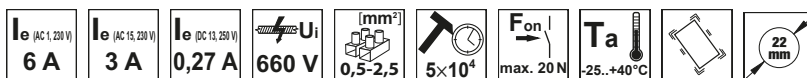
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RELEVANT STANDARD EN 60947-1

RELEVANT STANDARD EN 60947-5-1



# Pushbuttons with mushroom head

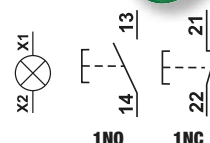
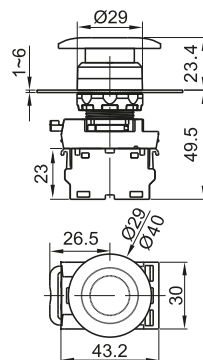


TRACON		
	IP 65	
NYG3-MBK		1 × NO
NYG3-MG		1 × NO
NYG3-MY		1 × NO
NYG3-MB		1 × NO
NYG3-MR		1 × NC
NYG3-MLG		1 × NO
NYG3-MLY		1 × NO
NYG3-MLB		1 × NO
NYG3-MLR		1 × NC

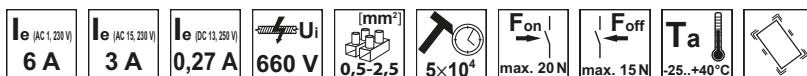
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RELEVANT STANDARD EN 60947-1

RELEVANT STANDARD EN 60947-5-1



# Emergency pushbutton, twist release

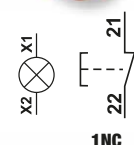
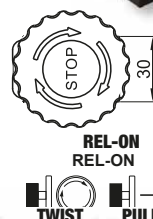
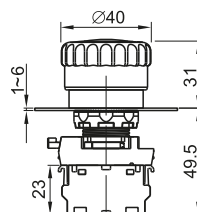


TRACON		
	IP 65	
NYG3-ETR		1 × NC
NYG3-ETLR		1 × NC

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RELEVANT STANDARD EN 60947-1

RELEVANT STANDARD EN 60947-5-1



## Double ON-OFF switches

I<sub>e</sub> (AC 1, 230 V)  
6 AI<sub>e</sub> (AC 15, 230 V)  
3 AI<sub>e</sub> (DC 13, 250 V)  
0,27 AU<sub>i</sub>  
660 V[mm<sup>2</sup>]  
0,5-2,5×10<sup>6</sup>F<sub>on</sub> I  
max. 20 NT<sub>a</sub>  
-25...+40°C

IP 65

22 mm

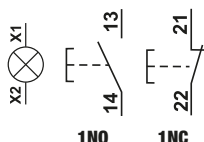
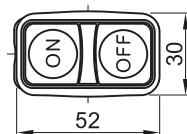
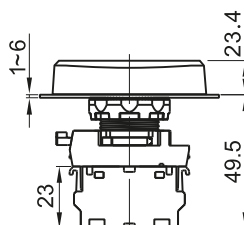


Pictograms

K/O



TRACON			IP 65		IP65		NC NO	
NYG3-D							1×NO+1×NC	
NYG3-D1	I	O					1×NO+1×NC	
NYG3-D2	ON	OFF					1×NO+1×NC	
NYG3-DL							1×NO+1×NC	
NYG3-DL1	I	O					1×NO+1×NC	
NYG3-DL2	ON	OFF					1×NO+1×NC	

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EN 60947-1RELEVANT STANDARD  
EN 60947-5-1

## Knob switches

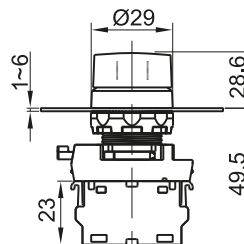
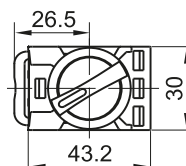
I<sub>e</sub> (AC 1, 230 V)  
6 AI<sub>e</sub> (AC 15, 230 V)  
3 AI<sub>e</sub> (DC 13, 250 V)  
0,27 AU<sub>i</sub>  
660 V[mm<sup>2</sup>]  
0,5-2,530×10<sup>4</sup>T<sub>a</sub>  
-25...+40°C

IP 65

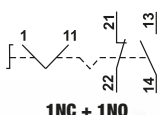
22 mm



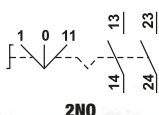
TRACON			IP 65		IP65		NC NO	
Normal	NYK3-S21BK	1 2					1×NO+1×NC	
	NYK3-S31BK	1 0 2					2 × NO	
	NYK3-S24BK	1 2 3					1×NO+1×NC	
With spring return	NYK3-S32BK	1 0 2					2 × NO	
	NYK3-S33BK	1 0 2					2 × NO	
	NYK3-S34BK	1 0 2					2 × NO	

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EN 60947-1RELEVANT STANDARD  
EN 60947-5-1

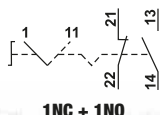
Two position normal



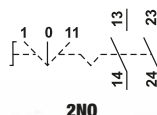
Three position normal



Two position with spring return



Three position with spring return



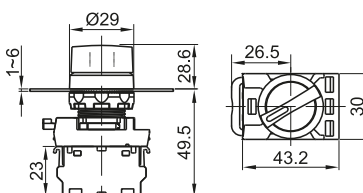
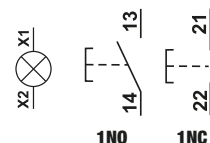
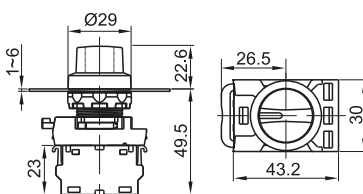
# Knob handle switches with light

<b>I<sub>e</sub></b> (AC 1, 230 V) <b>6 A</b>	<b>I<sub>e</sub></b> (AC 15, 230 V) <b>3 A</b>	<b>I<sub>e</sub></b> (DC 13, 250 V) <b>0,27 A</b>	<b>U<sub>i</sub></b> <b>660 V</b>	<b>[mm<sup>2</sup>]</b> <b>0,5-2,5</b>	<b>30×10<sup>4</sup></b>	<b>T<sub>a</sub></b> <b>-25...+40°C</b>	<b>22 mm</b>	<b>Ba9s</b>
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<b>NYK3-SL21R</b>		1xNO+1xNC
<b>NYK3-SL21G</b>		1xNO+1xNC
<b>NYK3-SL21Y</b>		1xNO+1xNC
<b>NYK3-SL21B</b>		1xNO+1xNC
<b>NYK3-SL24R</b>		1xNO+1xNC
<b>NYK3-SL24G</b>		1xNO+1xNC
<b>NYK3-SL24Y</b>		1xNO+1xNC
<b>NYK3-SL24B</b>		1xNO+1xNC
<b>NYK3-SL31R</b>		1xNO+1xNC
<b>NYK3-SL31G</b>		1xNO+1xNC
<b>NYK3-SL31Y</b>		1xNO+1xNC
<b>NYK3-SL31B</b>		1xNO+1xNC
<b>NYK3-SL34R</b>		1xNO+1xNC
<b>NYK3-SL34G</b>		1xNO+1xNC
<b>NYK3-SL34Y</b>		1xNO+1xNC
<b>NYK3-SL34B</b>		1xNO+1xNC

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K/32



# Key switches

<b>I<sub>e</sub></b> (AC 1, 230 V) <b>6 A</b>	<b>I<sub>e</sub></b> (AC 15, 230 V) <b>3 A</b>	<b>I<sub>e</sub></b> (DC 13, 250 V) <b>0,27 A</b>	<b>U<sub>i</sub></b> <b>660 V</b>	<b>[mm<sup>2</sup>]</b> <b>0,5-2,5</b>	<b>5×10<sup>4</sup></b>	<b>T<sub>a</sub></b> <b>-25...+40°C</b>	<b>22 mm</b>
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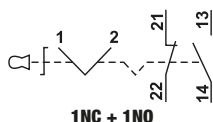


Normal	<b>NYK3-K21</b>		1xNO+1xNC
	<b>NYK3-K31</b>		1xNO+1xNC
With spring return	<b>NYK3-K24</b>		1xNO+1xNC
	<b>NYK3-K34</b>		1xNO+1xNC

page  
K/32

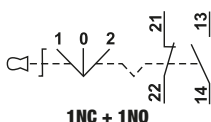


Two position normal



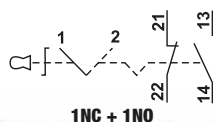
1NC + 1NO

Three position normal



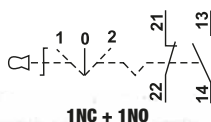
1NC + 1NO

Two position with spring return

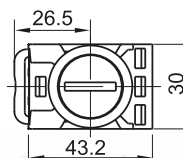
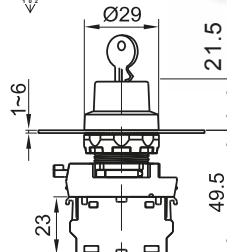


1NC + 1NO

Three position with spring return



1NC + 1NO



RELEVANT STANDARD  
**EN 60947-1**  
**EN 60947-5-1**

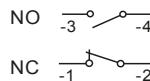


## Contact units

<b>I<sub>e</sub></b> (AC 1,230 V) <b>6 A</b>	<b>I<sub>e</sub></b> (AC 15,230 V) <b>3 A</b>	<b>I<sub>e</sub></b> (DC 15,250 V) <b>0,27 A</b>	<b>U<sub>i</sub></b> <b>660 V</b>	<b>[mm<sup>2</sup>]</b> <b>0,5-2,5</b>	<b>x10<sup>6</sup></b> <b>x10<sup>6</sup></b>	<b>T<sub>a</sub></b> <b>-25...+40°C</b>	
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TRACON		
<b>NYG3-CE1</b>		1 x NO
<b>NYG3-CE2</b>		1 x NC

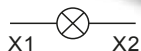


## Lighting unit



<b>U<sub>i</sub></b> <b>660 V</b>	<b>[mm<sup>2</sup>]</b> <b>0,5-2,5</b>	<b>T<sub>a</sub></b> <b>-25...+40°C</b>	
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TRACON		
<b>NYG3-SOC</b>		Ba9s


**K/44**

## Protection covers

<b>T<sub>a</sub></b> <b>-25...+40°C</b>		<b>IP</b> <b>65</b>	<b>% rH</b> <b>max. 90</b>	<b>22</b> <b>mm</b>
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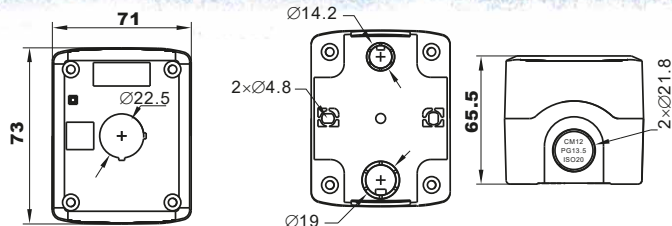
TRACON		
		<b>L x W x H (mm)</b>
<b>NYGD-1GR</b>		73 x 71 x 65.5
<b>NYGD-1YE</b>		73 x 71 x 65.5
<b>NYGD-2GR</b>		130 x 71 x 65.5
<b>NYGD-2YE</b>		130 x 71 x 65.5
<b>NYGD-3GR</b>		170 x 71 x 65.5
<b>NYGD-3YE</b>		170 x 71 x 65.5

TRACON		
		<b>L x W x H (mm)</b>
<b>NYGD-4GR</b>		210 x 71 x 65.5
<b>NYGD-4YE</b>		210 x 71 x 65.5
<b>NYGD-5GR</b>		250 x 71 x 65.5
<b>NYGD-5YE</b>		250 x 71 x 65.5
<b>NYGD-6GR</b>		290 x 71 x 65.5
<b>NYGD-6YE</b>		290 x 71 x 65.5

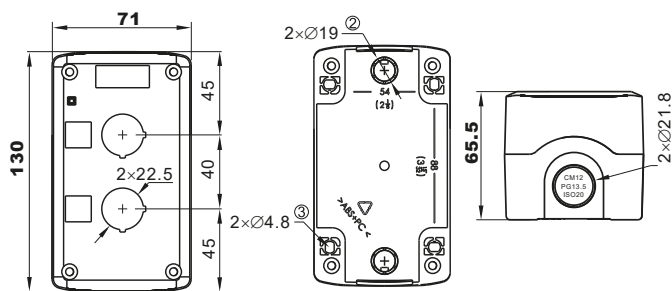

**NYGD-1GR**

**NYGD-2YE**

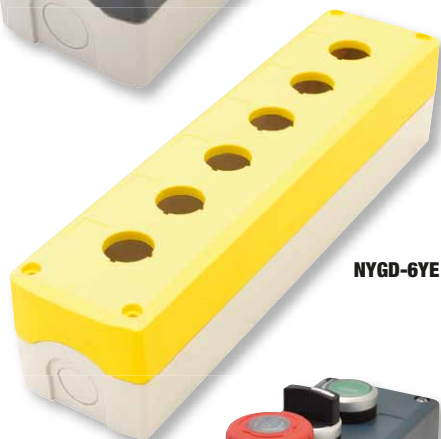
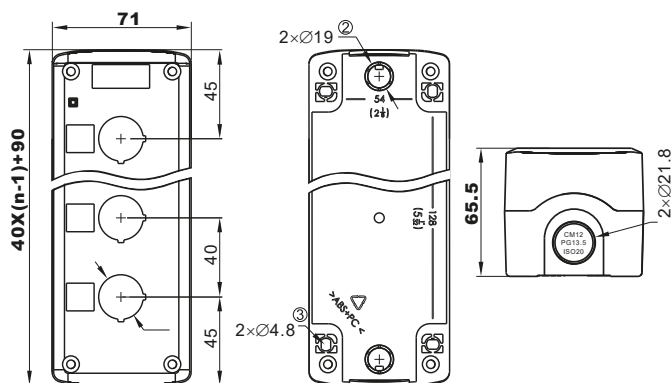
**NYGD-3GR**
**K/32**
**TRACON**  
ELECTRIC®



**NYGD-4YE**



**NYGD-5GR**



**NYGD-6YE**



## Accessories

## TRACON



<b>NYG3-CAP</b>	Protective cap, d=22mm; h=16mm; SILICA GEL
<b>NYG3-CAPH</b>	Protective cap, d=22mm; h=22mm; SILICA GEL
<b>NYG3-LHB</b>	Label holder (snap from the back), 25×10mm; ABS
<b>NYG3-LHBH</b>	Label holder (snap from the back), 25×17mm; ABS
<b>NYG3-LHS</b>	Label holder (push from side), 25×10mm; ABS
<b>NYG3-LHSH</b>	Label holder (push from side), 25×17mm; ABS
<b>NYG3-BLP</b>	Blanking plug, d=22mm; ABS
<b>NYGR25/22</b>	Reduction ring, D=25/d=22mm; ABS
<b>NYGR30/22</b>	Reduction rings from D=30 mm to d=22 mm (pairs)
<b>NYGR38/22</b>	Reduction rings from D=38 mm to d=22 mm (pairs)
<b>NYG3-SCAP</b>	Sealable cap, D=30mm/d=22mm; h=20mm; POLYCARBONATE
<b>NYG3-LCAP</b>	Padlockable cap, D=50mm/d=22mm; h=32mm; POLYCARBONATE
<b>NYG3-ES60</b>	EMERGENCY STOP plate, d=60mm; h=2mm; ABS
<b>NYG3-ES90</b>	EMERGENCY STOP plate, d=90mm; h=2mm; ABS
<b>NYG3-P30</b>	Protective collar, d=30; h=30mm; ABS
<b>NYG3-PH30</b>	Protective collar, d=30; h=28mm; ABS
<b>NYG3-P60</b>	Protective collar, d=60mm; h=30mm; ABS
<b>NYGD-FR</b>	Fastening ring to NYGD-..., d=22mm; ABS
<b>NYG3-ES60H</b>	EMERGENCY STOP plate, d=60mm, h=8mm, ABS
<b>NYG3-PH65</b>	Protective collar, W=65mm, H=80mm, D=38mm, ABS



NYG3-CAP



NYG3-LH



NYG3-BLP



NYGR25/22



NYGD-FR



NYG3-SCAP



NYG3-LCAP



NYG3-ES..



NYP3-P..



NYG3-PH30



NYG3-PH65



NYGR3..



## Voltage meter, Ammeter, Buzzer



660 V



10 A gG



IP 65



22 mm



Ta

-10...+40 °C



Pictograms

K/O

## TRACON



Um

Im



<b>NYG3-VR</b>		LED	24-500 V AC	—	—	
<b>NYG3-VG</b>	V AC	LED	24-500 V AC	—	—	
<b>NYG3-VY</b>		LED	24-500 V AC	—	—	
<b>NYG3-AR</b>		LED	—	1-100 A	—	
<b>NYG3-AG</b>	A AC	LED	—	1-100 A	—	
<b>NYG3-AY</b>		LED	—	1-100 A	—	
<b>NYG3-BFR230</b>	—	LED, blink	230 V AC	—	✓	
<b>NYG3-BFR24</b>	—	LED, blink	24 V AC/DC	—	✓	



NYG3-AR



NYG3-VR

NYG3-BFR..



CT



NYG3-AY



NYG3-AG



NYG3-VY






NYG3-VG



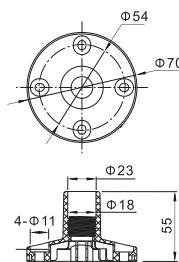
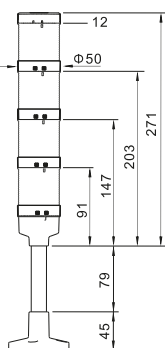
230 VAC



# LED warning lamp vertical base

 $U_i$ 660 V	 $T_a$ -20...+50°C	 10 A gG	<b>IP</b> <b>65</b>	<b>SMD</b> <b>LED</b>
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TRACON	$U_m$						
NYG3-50RYG	AC 230 V				—	—	X
NYG3-50RYGB	AC 230 V					—	X
NYG3-50RYGBW	AC 230 V					—	X
NYG3-50RYGM	AC/DC 24 V				—	—	✓
NYG3-50RYGBM	AC/DC 24 V					—	✓
NYG3-50RYGBWM	AC/DC 24 V						✓



NYG3-50RYG





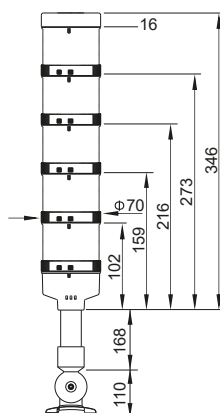
NYG3-50RYGB







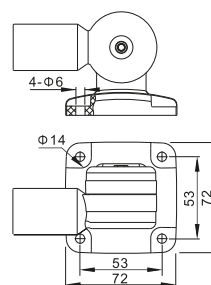
NYG3-50RYGBW

# LED warning lamp base kit

TRACON	$U_m$			
NYG3-70KITAC230	230V AC			80 dB
NYG3-70230R	230V AC			—
NYG3-70230Y	230V AC			—
NYG3-70230G	230V AC			—
NYG3-70230W	230V AC			—
NYG3-70230B	230V AC			—
NYG3-70KITACDC24	24V AC/DC			80 dB
NYG3-7024R	24V AC/DC			—
NYG3-7024Y	24V AC/DC			—
NYG3-7024G	24V AC/DC			—
NYG3-7024W	24V AC/DC			—
NYG3-7024B	24V AC/DC			—



 $U_i$ 660 V	 $T_a$ -20...+50°C	 10 A gG
	<b>IP</b> <b>65</b>	



NYG3-70KITAC230,  
NYG3-70KITACDC24



NYG3-70230R,  
NYG3-7024R



NYG3-70230Y,  
NYG3-7024Y



NYG3-70230G,  
NYG3-7024G



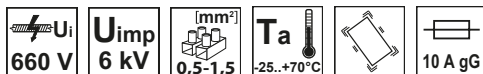
NYG3-70230W,  
NYG3-7024W



NYG3-70230B,  
NYG3-7024B



## LJL type LED signal lamps



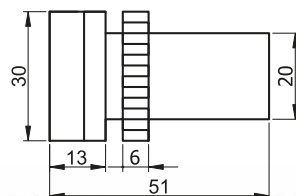
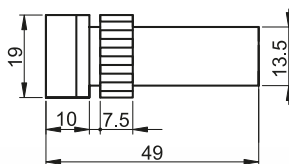
## Ø 16 mm versions

TRACON		Um
IP 65		
LJL16-RA		12 V AC/DC
LJL16-RC		24 V AC/DC
LJL16-RD		48 V AC/DC
LJL16-RE		230 V AC/DC
LJL16-RF		400 V AC
LJL16-GA		12 V AC/DC
LJL16-GC		24 V AC/DC
LJL16-GD		48 V AC/DC
LJL16-GE		230 V AC/DC
LJL16-GF		400 V AC
LJL16-YA		12 V AC/DC
LJL16-YC		24 V AC/DC
LJL16-YD		48 V AC/DC
LJL16-YE		230 V AC/DC
LJL16-YF		400 V AC
LJL16-WA		12 V AC/DC
LJL16-WC		24 V AC/DC
LJL16-WD		48 V AC/DC
LJL16-WE		230 V AC/DC
LJL16-WF		400 V AC
LJL16-BA		12 V AC/DC
LJL16-BC		24 V AC/DC
LJL16-BD		48 V AC/DC
LJL16-BE		230 V AC/DC
LJL16-BF		400 V AC

## Ø 22 mm versions

TRACON		Um	IP44
IP 65			
LJL22-RA		12 V AC/DC	
LJL22-RC		24 V AC/DC	
LJL22-RD		48 V AC/DC	
LJL22-RE		230 V AC/DC	
LJL22-RF		400 V AC	
LJL22-GA		12 V AC/DC	
LJL22-GC		24 V AC/DC	
LJL22-GD		48 V AC/DC	
LJL22-GE		230 V AC/DC	
LJL22-GF		400 V AC	
LJL22-YA		12 V AC/DC	
LJL22-YC		24 V AC/DC	
LJL22-YD		48 V AC/DC	
LJL22-YE		230 V AC/DC	
LJL22-YF		400 V AC	
LJL22-WA		12 V AC/DC	
LJL22-WC		24 V AC/DC	
LJL22-WD		48 V AC/DC	
LJL22-WE		230 V AC/DC	
LJL22-WF		400 V AC	
LJL22-BA		12 V AC/DC	
LJL22-BC		24 V AC/DC	
LJL22-BD		48 V AC/DC	
LJL22-BE		230 V AC/DC	
LJL22-BF		400 V AC	

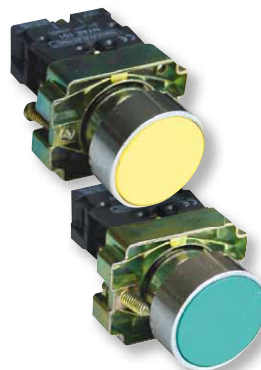
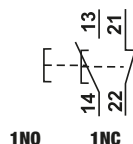
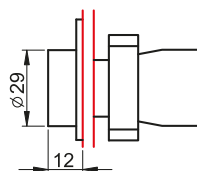
NYGD-1GR

page  
K/32

## Simple pushbuttons



TRACON				
NYGBA21	NYGBA21T		NYGD-1GR	1 × NO
NYGBA31Z	NYGBA31ZT			1 × NO
NYGBA51S	NYGBA51ST		page	1 × NO
NYGBA61K	NYGBA61KT		K/32	1 × NO
NYGBA42P	NYGBA42PT			1 × NC



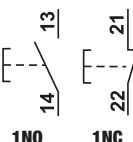
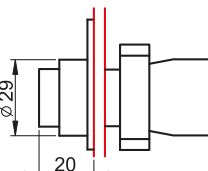
RELEVANT STANDARD  
EN 60947-1

RELEVANT STANDARD  
EN 60947-5-1

## Projecting pushbuttons



TRACON				
NYGBL21	NYGBL21T		NYGD-1GR	1 × NO
NYGBL31Z	NYGBL31ZT			1 × NO
NYGBL51S	NYGBL51ST		page	1 × NO
NYGBL61K	NYGBL61KT		K/32	1 × NO
NYGBL42P	NYGBL42PT			1 × NC



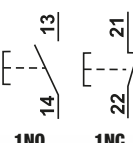
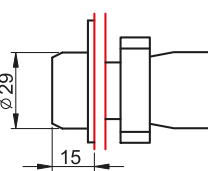
RELEVANT STANDARD  
EN 60947-1

RELEVANT STANDARD  
EN 60947-5-1

## Pushbuttons with rubber boot



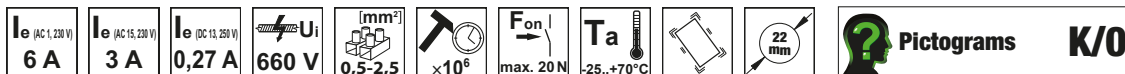
TRACON				
NYGBP21	NYGBP21T		NYGD-1GR	1 × NO
NYGBP31Z	NYGBP31ZT			1 × NO
NYGBP51S	NYGBP51ST		page	1 × NO
NYGBP61K	NYGBP61KT		K/32	1 × NO
NYGBP42P	NYGBP42PT			1 × NC



RELEVANT STANDARD  
EN 60947-1

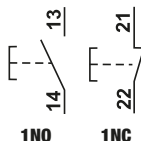
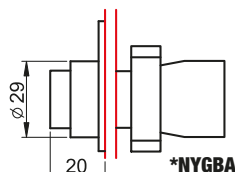
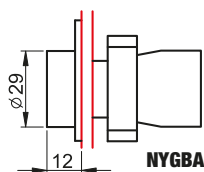
RELEVANT STANDARD  
EN 60947-5-1

## Pushbuttons with symbols



TRACON					
	IP 42		+		IP 42
	IP 65		+		IP 65
NYGBA3351	NYGBA3351T			NYGD-1GR	1 x NO
NYGBA3341	NYGBA3341T				1 x NO
NYGBA3311Z	NYGBA3311ZT			page	1 x NO
NYGBA4222P	NYGBA4222PT			K/32	1 x NC
NYGBA4322P*	NYGBA4322PT*				1 x NC

\* Protruding versions



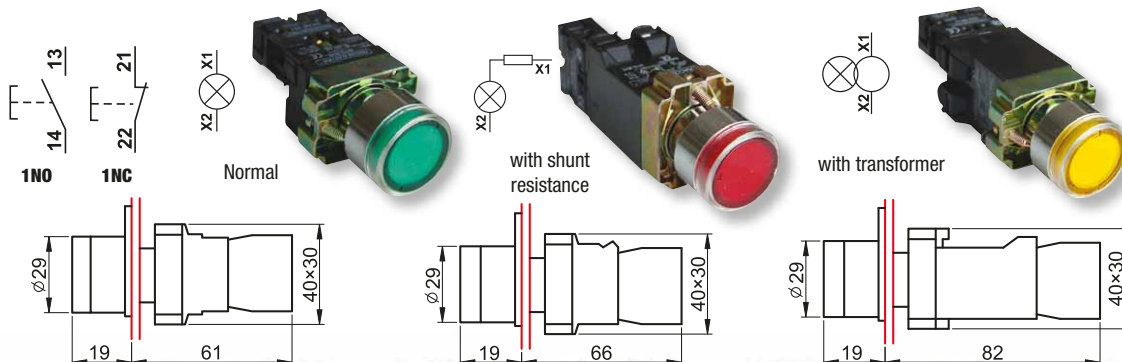
## Pushbuttons with built-in signal light (Ba9s)

TRACON						Um	Ba9s
	IP 42		+		IP 42		
	IP 65		+		IP 65		
	NYGBW33Z	-		NYGD-1GR	1 x NO	max. 400 V	NYGI230*
	NYGBW33S	NYGBW33ST		page	1 x NO	max. 400 V	NYGI230*
	NYGBW33K	NYGBW33KT		K/32	1 x NO	max. 400 V	NYGI230*
	NYGBW33P	NYGBW33PT			1 x NC	max. 400 V	NYGI230*
	NYGBW3371Z	NYGBW3371ZT		NYGD-1GR	1 x NO	230-240 V	NYGI130**
	NYGBW3571S	NYGBW3571ST		page	1 x NO	230-240 V	NYGI130**
	NYGBW3471P	NYGBW3471PT		K/32	1 x NC	230-240 V	NYGI130**
	NYGBW3341Z	-			1 x NO	230-240 V	NYGI6**
	NYGBW3541S	-			1 x NO	230-240 V	NYGI6**
	NYGBW3441P	-			1 x NC	230-240 V	NYGI6**
	NYGBW3351Z	-			1 x NO	400 V	NYGI6**
	NYGBW3551S	-			1 x NO	400 V	NYGI6**
	NYGBW3451P	-			1 x NC	400 V	NYGI6**

\* The applicable bulb should be selected in accordance to the operating voltage!

We deliver the signal lamps without light source.

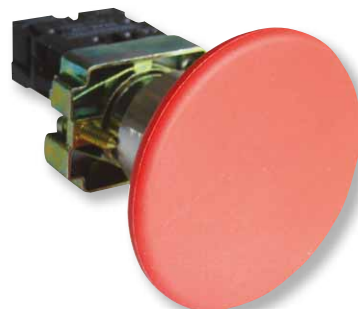
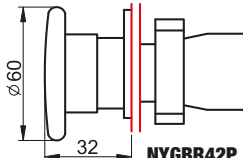
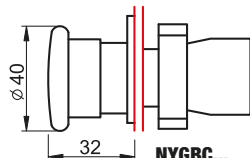
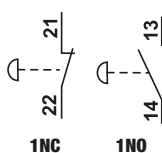
\*\* Signal lamps with ballast are operated under 130 V, by versions with transformer the operating voltage is 6 V.



# Pushbuttons with mushroom head

<b>I<sub>e</sub></b> (AC 1, 230 V) <b>6 A</b>	<b>I<sub>e</sub></b> (AC 15, 230 V) <b>3 A</b>	<b>I<sub>e</sub></b> (DC 13, 250 V) <b>0,27 A</b>	<b>U<sub>i</sub></b> <b>660 V</b>	<b>[mm<sup>2</sup>]</b> <b>0,5-2,5</b>	<b>F<sub>on</sub></b> <b>max. 20 N</b>	<b>T<sub>a</sub></b> <b>-25...+70°C</b>	<b>22 mm</b>	<b>Pictograms</b>	<b>K/0</b>
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TRACON				IP 42		IP 65		NC NO		40 mm	
NYGBC21	NYGBC21T	-								1 × NO	
NYGBC31Z	NYGBC31ZT	-								1 × NO	
NYGBC51S	NYGBC51ST	-								1 × NO	
NYGBC61K	NYGBC61KT	-								1 × NO	
NYGBC42P	NYGBC42PT	NYGBC42PTS								1 × NC	
NYGBR42P	NYGBR42PT	NYGBR42PTS								1 × NC	60 mm



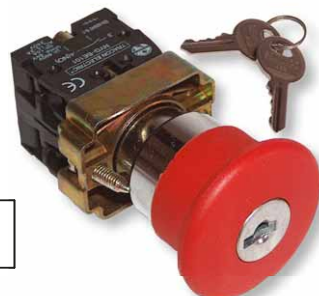
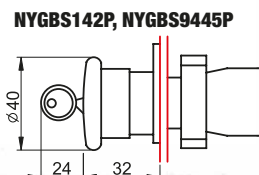
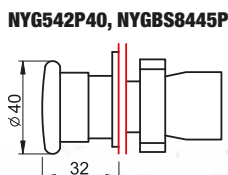
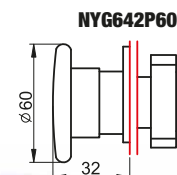
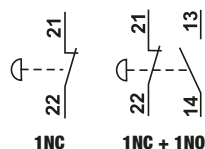
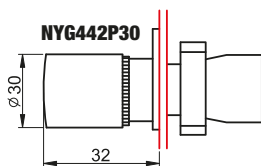
RELEVANT STANDARD  
EN 60947-1

RELEVANT STANDARD  
EN 60947-5-1

# Emergency pushbuttons with mushroom head

<b>I<sub>e</sub></b> (AC 1, 230 V) <b>6 A</b>	<b>I<sub>e</sub></b> (AC 15, 230 V) <b>3 A</b>	<b>I<sub>e</sub></b> (DC 13, 250 V) <b>0,27 A</b>	<b>U<sub>i</sub></b> <b>660 V</b>	<b>[mm<sup>2</sup>]</b> <b>0,5-2,5</b>	<b>F<sub>on</sub></b> <b>max. 20 N</b>	<b>F<sub>off</sub></b> <b>max. 15 N</b>	<b>T<sub>a</sub></b> <b>-25...+70°C</b>	<b>Pictograms</b>	<b>K/0</b>
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TRACON				IP 42		IP 65		NC NO		40 mm	
NYG442P30	NYG442P30T	NYG442P30TS								1 × NC	30 mm
NYG542P40	NYG542P40T	NYG542P40TS								1 × NC	40 mm
NYG642P60	NYG642P60T	NYG642P60TS								1 × NC	60 mm
NYGBS8445P	NYGBS8445PT	NYGBS8445PTS								1 × NC+1 × NO	40 mm
NYGBS142P	NYGBS142PT	NYGBS142PTS								1 × NC	40 mm
NYGBS9445P	NYGBS9445PT	NYGBS9445PTS								1 × NC+1 × NO	40 mm





## Double on-off pushbuttons

I<sub>e</sub> (AC 1, 230 V)  
6 AI<sub>e</sub> (AC 15, 230 V)  
3 AI<sub>e</sub> (DC 13, 250 V)  
0,27 AU<sub>i</sub>  
660 V(mm<sup>2</sup>)  
0,5-2,5×10<sup>6</sup>F<sub>on</sub> I  
max. 20 NT<sub>a</sub>  
-25...+70°C

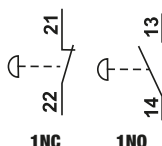
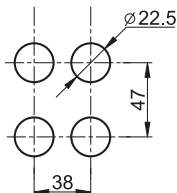
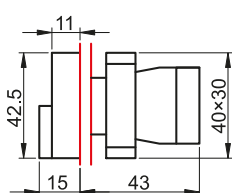
22 mm

22 mm

Pictograms

K/O

TRACON					
	IP 42		+		IP 65
NYKK8325	NYKK8325T			NYGD-1GR	1 × NC+1 × NO
NYKK8425	NYKK8425T	I	0	page K/32	1 × NC+1 × NO











## Double, on-off pushbuttons with pilot light (Ba9s)

I<sub>e</sub> (AC 1, 230 V)  
6 AI<sub>e</sub> (AC 15, 230 V)  
3 AI<sub>e</sub> (DC 13, 250 V)  
0,27 AU<sub>i</sub>  
660 V(mm<sup>2</sup>)  
0,5-2,5×10<sup>6</sup>F<sub>on</sub> I  
max. 20 NT<sub>a</sub>  
-25...+70°C

22 mm

22 mm

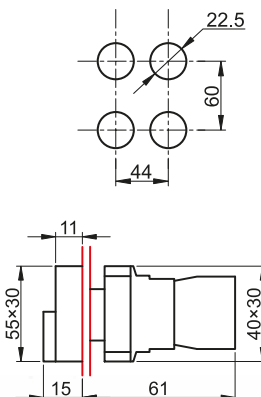
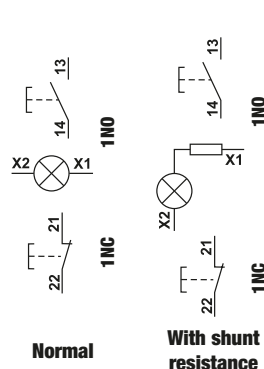
Ba9s

TRACON				NC NO	U <sub>m</sub>		
	NYKK8365	I		0	1 × NC+1 × NO	max. 400 V	NYGI230*
	NYKK8465	I		0	1 × NC+1 × NO	max. 400 V	NYGI230*
	NYKK8375	I		0	1 × NC+1 × NO	240 V	NYGI130**
	NYKK8475	I		0*	1 × NC+1 × NO	240 V	NYGI130**

\* The applicable bulb should be selected in accordance to the operating voltage!

\*\* Signal lamps with ballast are operated under 130 V.

We deliver the signal lamps without light source.



Signal lamps (Ba9s)

 **660 V**

 **0,5-2,5**







 **Ta**  
-25...+70°C

 **22 mm**

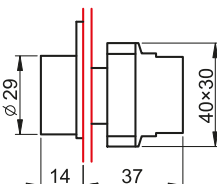
 **Ba9s**

 **Pictograms**


**K/0**

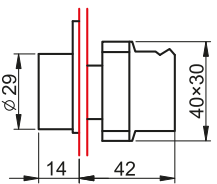
TRACON		Um			
 <b>IP 42</b>		 <b>IP 42</b>			
	<b>NYGBV61</b>	<b>NYGBV61T</b>	max. 400 V	<b>NYGD-1GR</b>	<b>NYGI230</b>
	<b>NYGBV63Z</b>	<b>NYGBV63ZT</b>	max. 400 V		<b>NYGI230</b>
	<b>NYGBV65S</b>	<b>NYGBV65ST</b>	max. 400 V		<b>NYGI230</b>
	<b>NYGBV66K</b>	<b>NYGBV66KT</b>	max. 400 V		<b>NYGI230</b>
	<b>NYGBV73Z</b>	<b>NYGBV73ZT</b>	230-240 V	<b>page K/32</b>	<b>NYGI130*</b>
	<b>NYGBV74P</b>	<b>NYGBV74PT</b>	230-240 V		<b>NYGI130*</b>
	<b>NYGBV75S</b>	<b>NYGBV75ST</b>	230-240 V		<b>NYGI130*</b>
	<b>NYGBV43Z</b>	<b>NYGBV43ZT</b>	230-240 V	<b>NYGD-1GR</b>	<b>NYGI6*</b>
	<b>NYGBV44P</b>	<b>NYGBV44PT</b>	230-240 V		<b>NYGI6*</b>
	<b>NYGBV45S</b>	<b>NYGBV45ST</b>	230-240 V		<b>NYGI6*</b>
	<b>NYGBV53Z</b>	<b>NYGBV53ZT</b>	400 V		<b>NYGI6*</b>
	<b>NYGBV55S</b>	<b>NYGBV55ST</b>	400 V		<b>NYGI6*</b>

We deliver the signal lamps without light source.  
The applicable bulb should be selected in accordance to the operating voltage!  
\* Signal lamps with ballast are operated under 130 V, by versions with transformer the operating voltage is 6 V.




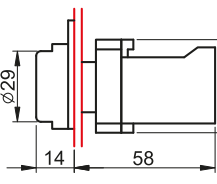
**Normal**






**With shunt resistance**





**With transformer**





TÜV MEEI TEST DOCUMENTATION  
**V-15180**

RELEVANT STANDARD  
**EN 62094**



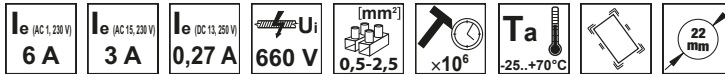
### Contactors



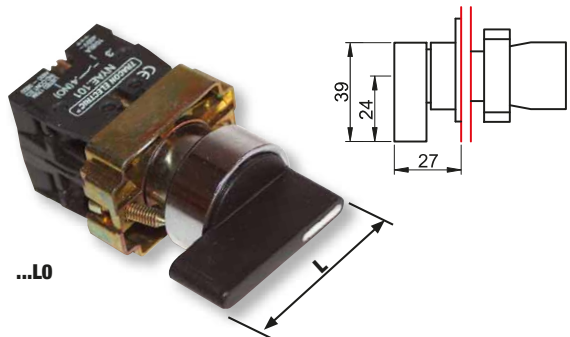
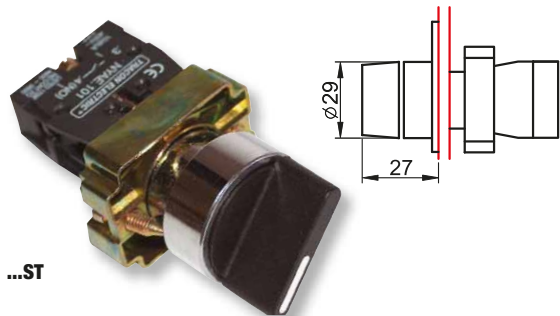




# Selector switches



TRACON			IP 42		IP 65	NC NO	L
Normal	NYBD21KST	NYBD21KSTT	1 2	1 2		1 × NO	29 mm
	-	NYBJ21KL0T	1 2	1 2		1 × NO	39 mm
	KBD25ST	KBD25STT	1 2	1 2		1 × NC+1 × NO	29 mm
	KBJ25L0	KBJ25L0T	1 2	1 2		1 × NC+1 × NO	39 mm
	NYBD33KST	NYBD33KSTT	1 0 2	1 0 2	NYGD-1GR	2 × NO	29 mm
	NYBJ33KL0	NYBJ33KL0T	1 0 2	1 0 2		2 × NO	39 mm
With spring return	NYBD41KST	NYBD41KSTT	1 2	1 2	page K/32	1 × NO	29 mm
	NYBJ41KL0	NYBJ41KL0T	1 2	1 2		1 × NO	39 mm
	NYBD45KST	NYBD45KSTT	1 2	1 2		1 × NC+1 × NO	29 mm
	NYBJ45KL0	NYBJ45KL0T	1 2	1 2		1 × NC+1 × NO	39 mm
	NYBD53KST	NYBD53KSTT	1 0 2	1 0 2		2 × NO	29 mm
	NYBJ53KL0	-	1 0 2	1 0 2		2 × NO	39 mm

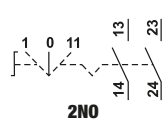
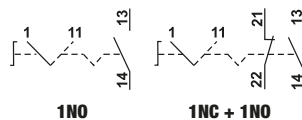
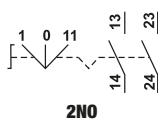
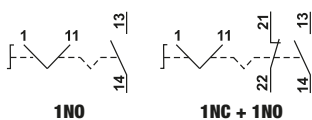


Two position normal

Three position normal

Two position with spring return
































Three position with spring return



## Selector switches with built-in signal light (Ba9s)



<b>I<sub>e</sub></b> (AC 1, 230 V) <b>6 A</b>	<b>I<sub>e</sub></b> (AC 15, 230 V) <b>3 A</b>	<b>I<sub>e</sub></b> (DC 13, 250 V) <b>0,27 A</b>	<b>U<sub>i</sub></b> <b>660 V</b>	<b>[mm<sup>2</sup>]</b> <b>0,5-2,5</b>	<b>x10<sup>6</sup></b> <b>x10<sup>6</sup></b>	<b>T<sub>a</sub></b> <b>-25...+70°C</b>	<b>U<sub>m</sub></b> <b>max. 400 V</b>	<b>22 mm</b>	<b>Ba9s</b>
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TRACON									
 <b>IP 42</b>		 <b>+</b> 							
Normal	<b>NYGBK2365Z</b>	<b>NYGBK2365ZT</b>			<b>NYGD-1GR</b>		<b>1 × NC+1 × NO</b>	<b>NYGLZ *</b>	
	<b>NYGBK2565S</b>	<b>NYGBK2565ST</b>					<b>1 × NC+1 × NO</b>	<b>NYGLS *</b>	
	<b>NYGBK2665K</b>	<b>NYGBK2665KT</b>					<b>1 × NC+1 × NO</b>	<b>NYGLK *</b>	
	<b>NYGBK2465P</b>	<b>NYGBK2465PT</b>					<b>1 × NC+1 × NO</b>	<b>NYGLP *</b>	
	<b>NYGBK3365Z</b>	<b>NYGBK3365ZT</b>					<b>1 × NC+1 × NO</b>	<b>NYGLZ *</b>	
	<b>NYGBK3565S</b>	<b>NYGBK3565ST</b>					<b>1 × NC+1 × NO</b>	<b>NYGLS *</b>	
	<b>NYGBK3665K</b>	<b>—</b>					<b>1 × NC+1 × NO</b>	<b>NYGLK *</b>	
	<b>NYGBK3465P</b>	<b>NYGBK3465PT</b>					<b>1 × NC+1 × NO</b>	<b>NYGLP *</b>	

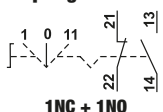


\* We deliver the signal lamps without light source.

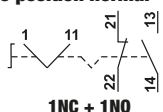
**RELEVANT STANDARD**  
**EN 60947-1**

**RELEVANT STANDARD**  
**EN 60947-5-1**

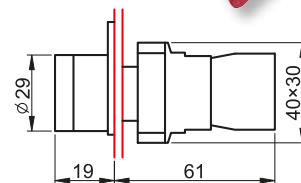
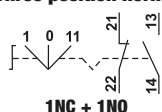
**Three position with spring return**



**Two position normal**























**Three position normal**

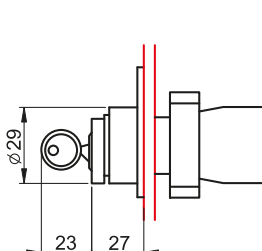


## Key switches

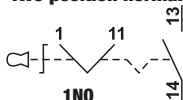


<b>I<sub>e</sub></b> (AC 1, 230 V) <b>6 A</b>	<b>I<sub>e</sub></b> (AC 15, 230 V) <b>3 A</b>	<b>I<sub>e</sub></b> (DC 13, 250 V) <b>0,27 A</b>	<b>U<sub>i</sub></b> <b>660 V</b>	<b>[mm<sup>2</sup>]</b> <b>0,5-2,5</b>	<b>x10<sup>6</sup></b> <b>x10<sup>6</sup></b>	<b>T<sub>a</sub></b> <b>-25...+70°C</b>	<b>22 mm</b>
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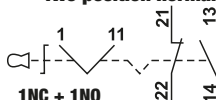
TRACON									
 <b>IP 42</b>  + 					 NC NO				
Normal	<b>NYBG21KK</b>	<b>NYBG21KKT</b>		<b>NYGD-1GR</b>	$1 \times \text{NO}$				
	<b>NYBG41KK</b>	<b>NYBG41KKT</b>			$1 \times \text{NO}$				
	<b>NYBG25KK</b>	<b>NYBG25KKT</b>			$1 \times \text{NC} + 1 \times \text{NO}$				
	<b>NYBG53KK</b>	<b>NYBG53KKT</b>			$2 \times \text{NO}$				
With spring return	<b>NYBG61KK</b>	<b>NYBG61KKT</b>		<b>page K/32</b>	$1 \times \text{NO}$				
	<b>NYBG65KK</b>	<b>NYBG65KKT</b>		$1 \times \text{NC} + 1 \times \text{NO}$					
	<b>NYBG73KK</b>	<b>NYBG73KKT</b>		$2 \times \text{NO}$					



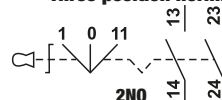
**Two position normal**



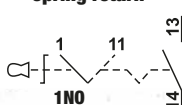
**Two position normal**



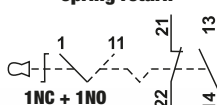
**Three position normal**



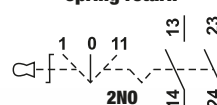
**Two position with spring return**



**Two position with spring return**





**Three position with spring return**






















## Normal signal bulbs



TRACON	U <sub>m</sub>		
NYGI6	6 V AC/DC	1,2 W	Ba9s
NYGI12	12 V AC/DC	2 W	Ba9s
NYGI24	24 V AC/DC	2 W	Ba9s
NYGI48	48 V AC/DC	2 W	Ba9s
NYGI130	130 V AC/DC	2,6 W	Ba9s
NYGI230	230 V AC	glimm	Ba9s

## LED signal bulbs (new version)



TRACON	U <sub>m</sub>		
NYGL-AC400B	400 V AC		Ba9s
NYGL-AC400G	400 V AC		Ba9s
NYGL-AC400R	400 V AC		Ba9s
NYGL-AC400W	400 V AC		Ba9s
NYGL-AC400Y	400 V AC		Ba9s
NYGL-ACDC230B	230 V AC/DC		Ba9s
NYGL-ACDC230G	230 V AC/DC		Ba9s
NYGL-ACDC230R	230 V AC/DC		Ba9s
NYGL-ACDC230W	230 V AC/DC		Ba9s
NYGL-ACDC230Y	230 V AC/DC		Ba9s
NYGL-ACDC24B	24 V AC/DC		Ba9s
NYGL-ACDC24G	24 V AC/DC		Ba9s
NYGL-ACDC24R	24 V AC/DC		Ba9s
NYGL-ACDC24W	24 V AC/DC		Ba9s
NYGL-ACDC24Y	24 V AC/DC		Ba9s

## Contact elements







3 — 4 (NO)  
NYAE101



1 — 2 (NC)  
NYAE102




TRACON		
NYAE101	1 × NO	
NYAE102	1 × NC	

If necessary, a maximum number of four contact elements can be fixed to the base unit.

## Reduction rings



TRACON	
NYGR25/22	Reduction ring, D=25/d=22mm; ABS
NYGR30/22	Reduction rings from D=30 mm to d=22 mm (pairs)
NYGR38/22	Reduction rings from D=38 mm to d=22 mm (pairs)

Reduction rings can be installed for proper fixing of control devices to boards in case some control devices have to be replaced in old type of boards.









Our range of products is continuously and quickly expanding. Our catalogue shows our products as of January 2023. Check our website to stay up-to-date.

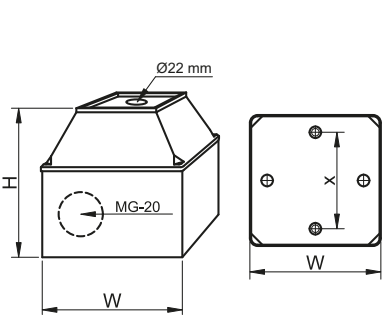
## SCAN THE QR CODE!

- Check our new products
- Be updated



Enclosures

TRACON			W (mm)	H (mm)	x (mm)		IP..
TK/T2+F2/	 + 		68	80	44	2 × MG-20	IP 44
TK/T2+F2S/	 + 		68	80	44	2 × MG-20	IP 44



TÜV MEEI TEST DOCUMENTATION  
V-15180

RELEVANT STANDARD  
EN 60529



# TDB



# DISTRIBUTION BOXES

## Relay safety switches



Pictograms

K/O

The SSTM type switches are appropriate for safe ON/OFF switching of various machine tools or electric devices, as they ensure automatic protection against unwanted start, when power supply returns after a network failure. The power failure relay is factory built-in, without own output contacts, the operating voltage is ensured by the load-side contacts of the switch. In case of power failure, the relay disconnects the controlled device from the power supply line. Re-start is only possible with repeated operation of the green pushbutton, by the user.

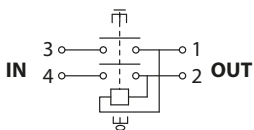
Attention! A device must be connected according to the diagram on the side of the housing.



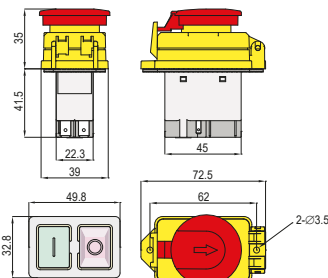
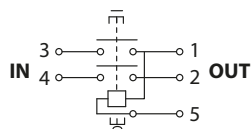
## SSTM-01..



## TRACON SSTM-01



## TRACON SSTM-015

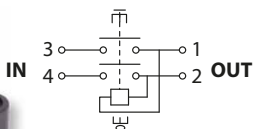
230  
V ACI<sub>e</sub> (AC 3, 230 V)  
12 A

1~

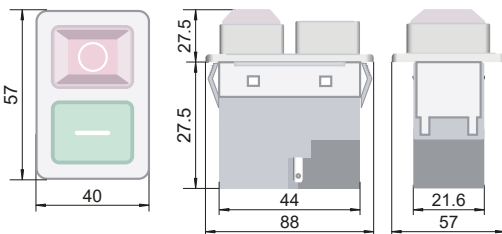
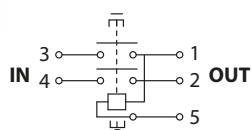
## SSTM-02..



## TRACON SSTM-02



## TRACON SSTM-025

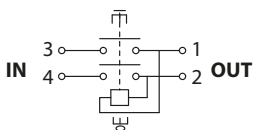
230  
V ACI<sub>e</sub> (AC 3, 230 V)  
12 A

1~

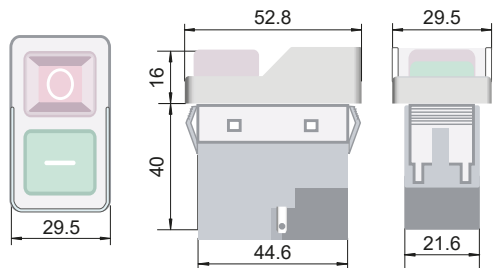
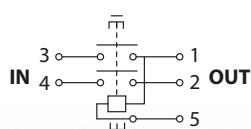
## SSTM-03..



## TRACON SSTM-03



## TRACON SSTM-035

230  
V ACI<sub>e</sub> (AC 3, 230 V)  
12 A

1~



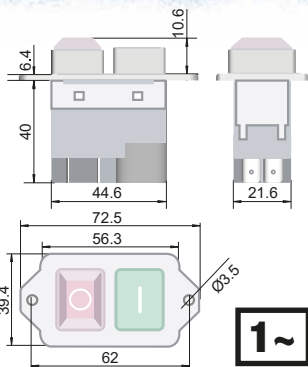
## SSTM-04..

**230  
V AC**

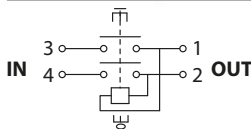
**I<sub>e</sub> (AC 3, 230 V)  
12 A**

**6,3x0,8 mm**

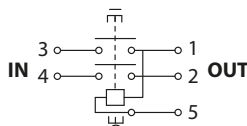
**5x10<sup>4</sup>**



### TRACON SSTM-04



### TRACON SSTM-045



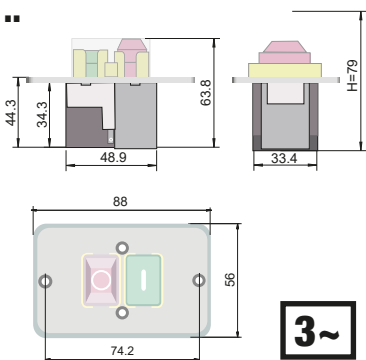
## SSTM-31..

**400  
V AC**

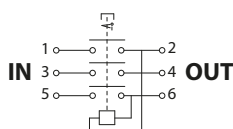
**I<sub>e</sub> (AC 3, 400 V)  
8 A**

**6,3x0,8 mm**

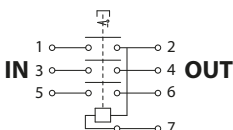
**x10<sup>4</sup>**



### TRACON SSTM-316



### TRACON SSTM-317



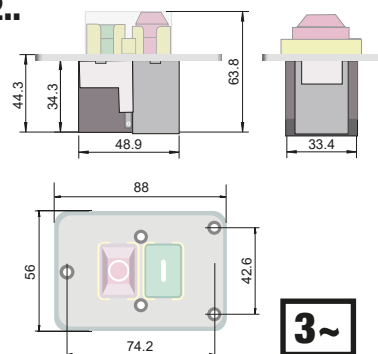
## SSTM-32..

**400  
V AC**

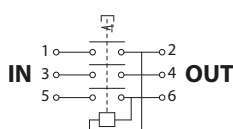
**I<sub>e</sub> (AC 3, 400 V)  
8 A**

**6,3x0,8 mm**

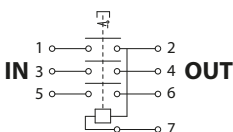
**5x10<sup>4</sup>**



### TRACON SSTM-326



### TRACON SSTM-327



## Electronics boxes



**M/17**

## SSTM-BOX

Can be fitted to the following versions:

**SSTM-02, -025**

**SSTM-316, -317**

**SSTM-326, -327**

**113x77x60 mm**



**IP  
42**

**TRACON SSTM-BOX**



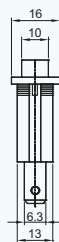
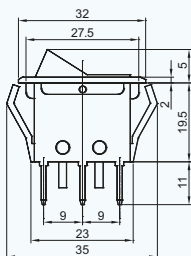


## TES device switches

<b>U<sub>m</sub></b> max. 250 V	<b>I<sub>e</sub></b> (AC 1, 230 V) <b>16 A</b>	<b>I<sub>e</sub></b> (AC 15, 230 V) <b>6 A</b>	<b>I<sub>e</sub></b> (DC 13, 250 V) <b>0,27 A</b>	<b>U<sub>i</sub></b> <b>660 V</b>	<b>U<sub>imp</sub></b> <b>6 kV</b>	<b>[mm<sup>2</sup>]</b> <b>0,5-2,5</b>	<b>5×10<sup>4</sup></b>	<b>[h]</b> <b>15.000</b>	<b>% rH</b> <b>max. 95</b>	<b>T<sub>a</sub></b> <b>-20...+55°C</b>	<b>IP 42</b>	<b>10 A gG</b>
------------------------------------	---	---	--	--------------------------------------	---------------------------------------	---	-------------------------	-----------------------------	-------------------------------	--	--------------	----------------

The device switches are suitable to be installed into various control devices, household machines and other electrical equipment. We suggest installing the device switches provided with signal lights in such places where it is important to indicate the ON condition of the equipment. The switch can be easily snapped into the mounting hole and wires equipped with 4,6 × 0,8 and 6,3 × 0,8 flat, slip-on, female clips can be connected onto its standard terminals.

## ON-OFF switch



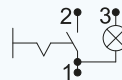
TRACON

TES-11

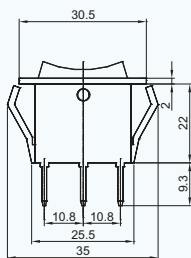
6,3 × 0,8 mm



3



## Middle 0 position switch



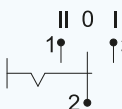
TRACON

TES-12

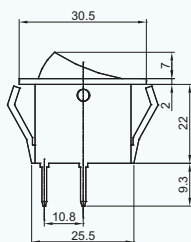
6,3 × 0,8 mm



-



## ON-OFF switch



TRACON

TES-13

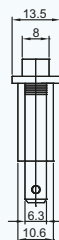
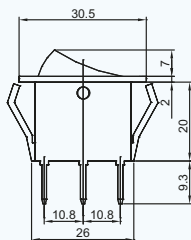
6,3 × 0,8 mm



-



## ON-OFF switch



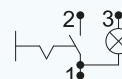
TRACON

TES-21

6,3 × 0,8 mm

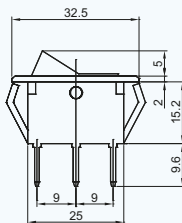
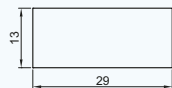
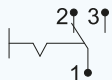


✓

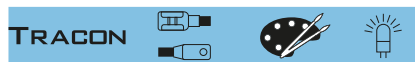




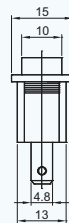
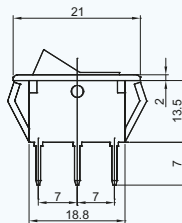
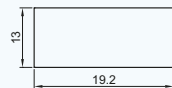
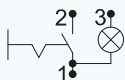
**TES-22** 4,8 × 0,8 mm **0-1** -



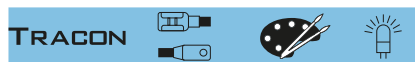
**Alternate switch**



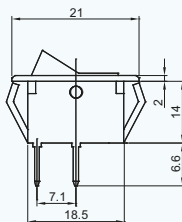
**TES-33** 4,8 × 0,8 mm **0-1** ✓



**ON-OFF switch**



**TES-34** 4,8 × 0,8 mm **0-1** -






**ON-OFF switch**

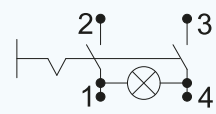
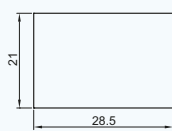
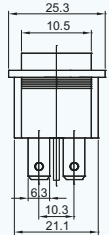
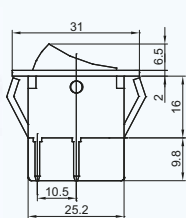


## PORTABLE METERING DEVICES






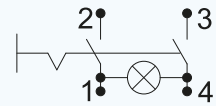
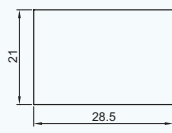
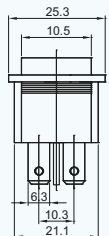
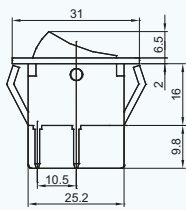
2 poles switch ON-OFF switch

**TRACON**     
**TES-41** 6,3 × 0,8 mm   ✓






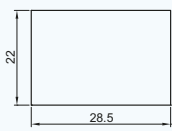
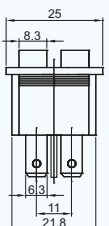
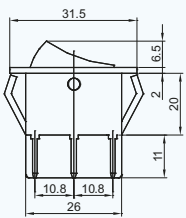
2 poles switch ON-OFF switch

**TRACON**     
**TES-42** 6,3 × 0,8 mm 0-1 ✓






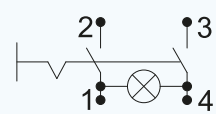
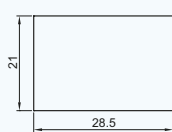
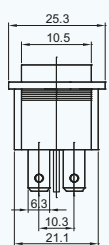
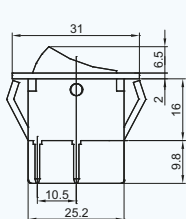
ON-OFF switch

**TRACON**     
**TES-43** 6,3 × 0,8 mm 0-1, 0-1 ✓






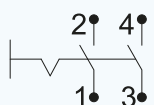
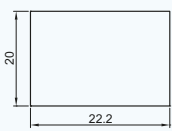
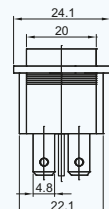
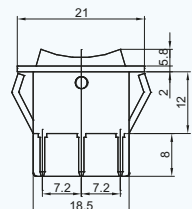
2 poles switch ON-OFF switch

**TRACON**     
**TES-44** 6,3 × 0,8 mm 0-1 ✓



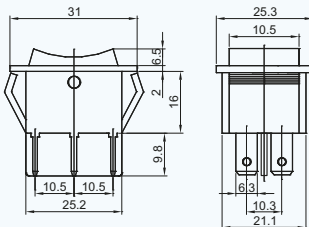
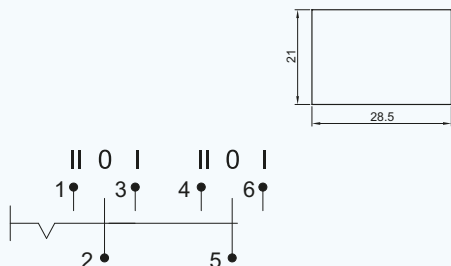
2 poles switch ON-OFF switch

**TRACON**     
**TES-51** 4,8 × 0,8 mm 0-1 -





<b>TES-52</b>	6,3 × 0,8 mm	<b>I-O-II</b>	-
<b>TES-52-2</b>	6,3 × 0,8 mm	<b>I-O-II</b>	-

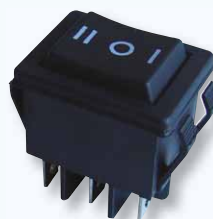
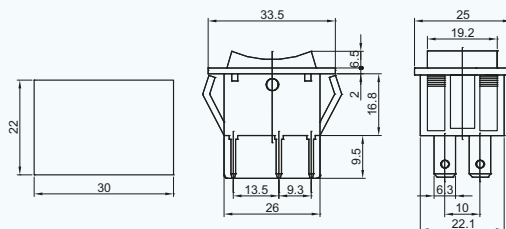


2 poles switch ON-OFF switch



TES-52

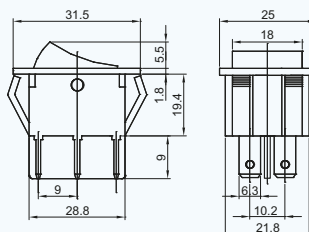
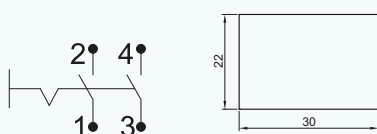
2 poles switch ON-OFF switch (With spring return)



TES-52-2



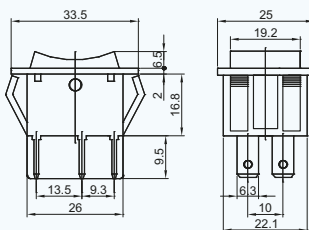
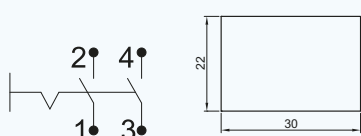
<b>TES-53</b>	6,3 × 0,8 mm	<b>O-I</b>	-
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2 poles switch ON-OFF switch



<b>TES-53-1</b>	6,3 × 0,8 mm	<b>O-I</b>	-
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2 poles switch ON-OFF switch (With spring return)

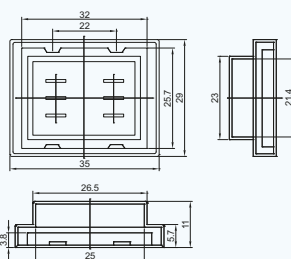


## TRACON

<b>TES-GB</b>	<b>TES-GB1</b>
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Can be fitted to the following versions:

<b>TES-42</b>	<b>TES-33</b>
<b>TES-43</b>	<b>TES-34</b>
<b>TES-52</b>	
<b>TES-53</b>	



PVC membrane



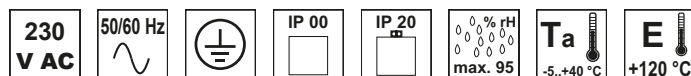
TES-GB



TES-GB1



## One phase isolating transformers TVTR



TRACON	P <sub>n</sub>	U <sub>pr</sub>	U <sub>sec</sub>	P <sub>sec</sub> *	I <sub>sec</sub>
TVTR-50-A	50 VA	230 V	3-6-12-18-24 V	6,25-12,5-25-37,5-50 VA	2,08 A
TVTR-50-B		230 V	6-12-18-24 V	12,5-25-37,5-50 VA	2,08 A
TVTR-50-C		230 V	12-24-42 V	14,2-28,5-50 VA	1,19 A
TVTR-50-D		230 V	24-42-110 V	10-19-50 VA	0,45 A
TVTR-50-F		230 V	24-230 V	5,2-50 VA	0,21 A
TVTR-100-A	100 VA	230 V	3-6-12-18-24 V	12,5-25-50-75-100 VA	4,16 A
TVTR-100-B		230 V	6-12-18-24 V	25-50-75-100 VA	4,16 A
TVTR-100-C		230 V	12-24-42 V	28,5-57,1-100 VA	2,38 A
TVTR-100-D		230 V	24-42-110 V	21,8-38,1-100 VA	0,90 A
TVTR-100-F		230 V	24-230 V	10,4-100 VA	0,43 A
TVTR-150-B	150 VA	230 V	6-12-18-24 V	37,5-75-112,5-150 VA	6,25 A
TVTR-150-C		230 V	12-24-42 V	42,8-85,7-150 VA	3,57 A
TVTR-150-D		230 V	24-42-110 V	32,7-57,2-150 VA	1,36 A
TVTR-150-E		230 V	42-110-230 V	27,3-71,7-150 VA	0,65 A
TVTR-150-F		230 V	24-230 V	15,6-150 VA	0,65 A
TVTR-200-B	200 VA	230 V	6-12-18-24 V	50-100-150-200 VA	8,30 A
TVTR-200-C		230 V	12-24-42 V	57,1-114,2-200 VA	4,76 A
TVTR-200-D		230 V	24-42-110 V	43,6-76,3-200 VA	1,81 A
TVTR-200-E		230 V	42-110-230 V	36,5-95,6-200 VA	0,86 A
TVTR-200-F		230 V	24-230 V	20,8-200 VA	0,86 A

\* depending on the secondary voltage at the tapping exit;



In these devices the primary coil is separated from the secondary coil by a basic insulator. They can be used for power transmission, control, signalling actuating or other low voltage electric circuits, e.g. to generate **functional low voltage (FELV)** according to the standard **HD 60364-4-41** or to perform electrical protection to a secondary consumer with simple insulation.

The transformers deliver one-phase power with eight different secondary voltage values (U<sub>sec</sub>=3-6-12-18-24-42-110-230 V).

The transformers are built in conformity to the requirements within **EN 60742** and **EN 61558**. Their degree of protection is IP00, i. e. they are meant to be built in as parts into another equipment. Connections are ensured by screwed connectors with IP 20 degree of protection. Rated powers range between 50 – 630 VA, depending on construction. The secondary coil has more wiretapping exits. The rated power refers to the highest secondary voltage value. At the other wire-tapping exits the transformer delivers proportionally lower power values (see table).

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**EN 61558-2-1**

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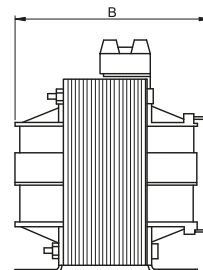
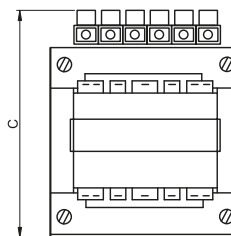
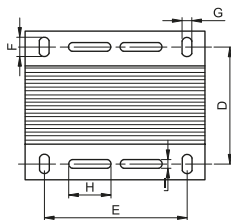
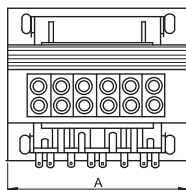
RLV



TRACON	$P_n$	$U_{pr}$	$U_{sec}$	$P_{sec}$ *	$I_{sec}$
TVTR-250-B	250 VA	230 V	6-12-18-24 V	62,5-125-187,5-250 VA	10,41 A
TVTR-250-C		230 V	12-24-42 V	71,4-142,8-250 VA	5,95 A
TVTR-250-D		230 V	24-42-110 V	54,5-95,4-250 VA	2,27 A
TVTR-250-E		230 V	42-110-230 V	45,6-119,5-250 VA	1,08 A
TVTR-250-F		230 V	24-230 V	26-250 VA	1,08 A
TVTR-300-B	300 VA	230 V	6-12-18-24 V	75-150-225-300 VA	12,50 A
TVTR-300-C		230 V	12-24-42 V	85,7-171,4-300 VA	7,14 A
TVTR-300-D		230 V	24-42-110 V	65,4-114,5-300 VA	2,72 A
TVTR-300-E		230 V	42-110-230 V	54,7-143,4-300 VA	1,30 A
TVTR-300-F		230 V	24-230 V	31,3-300 VA	1,30 A
TVTR-400-B	400 VA	230 V	6-12-18-24 V	100-200-300-400 VA	16,66 A
TVTR-400-C		230 V	12-24-42 V	114,2-228,5-400 VA	9,52 A
TVTR-400-D		230 V	24-42-110 V	87,2-152,7-400 VA	3,63 A
TVTR-400-E		230 V	42-110-230 V	73-191,3-400 VA	1,73 A
TVTR-400-F		230 V	24-230 V	41,7-400 VA	1,73 A
TVTR-500-C	500 VA	230 V	12-24-42 V	142,8-285,7-500 VA	11,90 A
TVTR-500-D		230 V	24-42-110 V	109-190,9-500 VA	4,54 A
TVTR-500-E		230 V	42-110-230 V	91,3-239,1-500 VA	2,17 A
TVTR-500-F		230 V	24-230 V	52,1-500 VA	2,17 A
TVTR-630-C	630 VA	230 V	12-24-42 V	180-360-630 VA	15 A
TVTR-630-D		230 V	24-42-110 V	137,4-240,5-630 VA	5,72 A
TVTR-630-E		230 V	42-110-230 V	115-301,3-630 VA	5,73 A
TVTR-630-F		230 V	24-230 V	65,7-630 VA	2,73 A

\* depending on the secondary voltage at the tapping exit;

TRACON	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)	
TVTR-50	75	80	77	50	56	10	5,5	28	4	1,2 kg
TVTR-100	85	90	85	59	64	10	5,5	40	5	1,9 kg
TVTR-150	98	90	95	65	84	12	6	40	5	2,6 kg
TVTR-200	98	100	95	74	84	12	6	40	5	3,1 kg
TVTR-250	98	110	95	84	84	12	6	40	5	3,6 kg
TVTR-300	110	110	103	82	90	12	6	-	-	4,6 kg
TVTR-400	123	112	110	84	90	14	7	50	5	5,3 kg
TVTR-500	122	120	107	98	90	14	7	50	5	6,3 kg
TVTR-630	154	115	135	87	122	22	8	50	5	7,2 kg



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## Monophase isolating safety transformers

230/400  
V AC

50/60 Hz



IP 00

IP 20

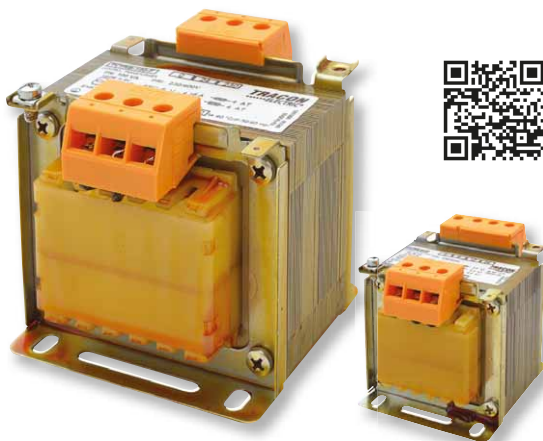
0,0% rH  
max. 95Ta  
-5...+40 °CE  
+120 °C

Pictograms

K/0

TRACON	P <sub>n</sub>	U <sub>pr</sub>	U <sub>sec</sub>	P <sub>sec</sub> *	I <sub>sec</sub>
<b>TVTRB-60-A</b>	60 VA	230-400 V	6-12-24 V	15-30-60 VA	2,5 A
<b>TVTRB-60-F</b>		230-400 V	24-230 V	6,2-60 VA	0,26 A
<b>TVTRB-100-A</b>	100 VA	230-400 V	6-12-24 V	25-50-100 VA	4,17 A
<b>TVTRB-100-F</b>		230-400 V	24-230 V	10,4-100 VA	0,43 A
<b>TVTRB-100-O</b>		230 V	42 V	100 VA	2,38 A

\* depending on the secondary voltage at the tapping exit;



These products are meant for insulating separation in low-voltage power transmission, actuating, signalling, control and other circuits, to generate **shock-proof low voltage (SELV)** according to the standard **MSZ HD 60364-4-41**. A protective separation is built in between the primary and secondary coil.

The safety insulating transformers deliver at the secondary side so-called safety low voltage below 50 V. The insulating transformers deliver at the secondary side low voltage above 50 V.

All our transformers satisfy the requirements set within **EN 60742** and **EN 61558**. Their degree of protection is IP00, i. e. they are meant to be built in as parts into another equipment. Connections are ensured by screwed connectors with IP 20 degree of protection.

Rated powers range between 60 – 600 VA, depending on construction. The secondary coil has more wire-tapping exits.

The rated power refers to the highest secondary voltage value. At the other wire-tapping exits the transformer delivers proportionally lower power values (see table).

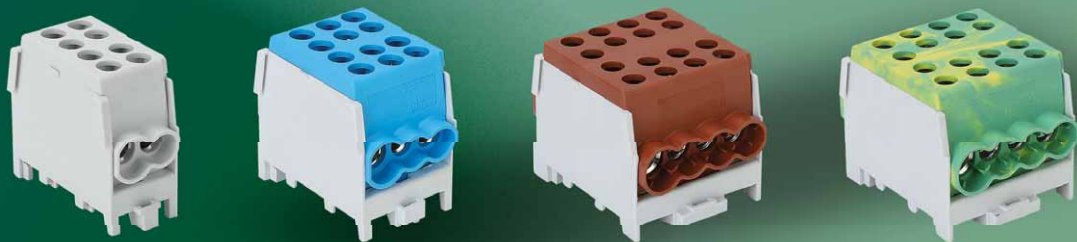
RELEVANT STANDARD  
**EN 61558-1**

RELEVANT STANDARD  
**EN 61558-2-4**

## FLECU



### MAIN LINE DISTRIBUTION TERMINAL BLOCKS

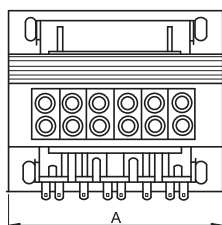


TRACON	P <sub>n</sub>	U <sub>pr</sub>	U <sub>sec</sub>	P <sub>sec</sub> *	I <sub>sec</sub>
<b>TVTRB-160-B</b>	160 VA	230-400 V	12-24 V	80-160 VA	6,67 A
<b>TVTRB-160-F</b>		230-400 V	24-230 V	16,7-160 VA	0,70 A
<b>TVTRB-160-M</b>		230 V	12 V	160 VA	13,34 A
<b>TVTRB-250-B</b>	250 VA	230-400 V	12-24 V	125-250 VA	10,42 A
<b>TVTRB-250-F</b>		230-400 V	24-230 V	26-250 VA	1,09 A
<b>TVTRB-400-B</b>		230-400 V	12-24 V	200-400 VA	16,67 A
<b>TVTRB-400-F</b>	400 VA	230-400 V	24-230 V	41,74-400 VA	1,74 A
<b>TVTRB-400-O</b>		230 V	42 V	400 VA	9,52 A
<b>TVTRB-600-B</b>		230-400 V	12-24 V	300-600 VA	25 A
<b>TVTRB-600-F</b>	600 VA	230-400 V	24-230 V	62,6-600 VA	2,61 A
<b>TVTRB-600-O</b>		230 V	42 V	600 VA	14,29 A

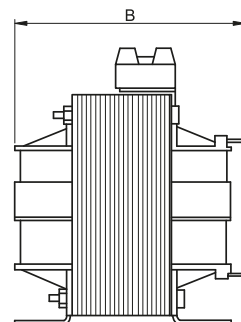
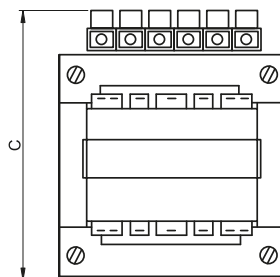
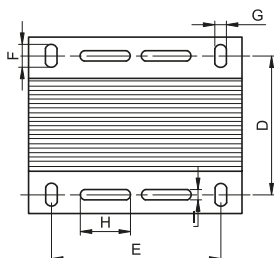
\* depending on the secondary voltage at the tapping exit;

TRACON	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)	m
<b>TVTRB-60</b>	75	90	76	60	56	10	5	28	4	1,5 kg
<b>TVTRB-100</b>	84	89	84	54	64	10	5,5	40	5	2,0 kg
<b>TVTRB-160</b>	96	80	108	70	84	11	5,8	35	3,6	2,4 kg
<b>TVTRB-250</b>	98	98	95	65	84	12	6	40	5	2,7 kg
<b>TVTRB-400</b>	123	115	110	84	90	14	7	50	5	5,3 kg
<b>TVTRB-600</b>	155	135	135	98	122	22	8	50	5	7,7 kg

RELEVANT STANDARD  
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RELEVANT STANDARD  
**EN 61558-2-1**



# ESPD

## SURGE ARRESTERS

