

# PUSH BUTTONS NEF30

## DATA SHEET

no: KK-P\_NEF30



Drives of the NEF30 series control buttons with metal bodies are intended for installation in standardized  $\varnothing 30.5$ mm holes, in numerous types of control and signal equipment or directly into bodies of machines and equipment. They are manufactured in two climate designs: N/2 and W/3. Buttons of the NEF30 type feature a modular construction.

## TECHNICAL DATA:

Parameter	Value
<b>Insulation rated voltage <math>U_i</math></b>	500V
<b>Rated thermal current <math>I_{th}</math></b>	10A
<b>Rated voltages and switching currents per utilization category <math>I_e</math></b> - $U_e$ 230V/400V (AC15) - $U_e$ 110V/220V (DC13)	6A / 4A 1A / 0,25A
<b>Rated impulse withstand voltage <math>U_{imp}</math></b>	2500V
<b>Limited withstand current</b>	1000A
<b>Mechanical life:</b> - for return drives - for knob-operated - for interlocked drives	$3 \times 10^6$ $10^5$ $10^4$
<b>Rated frequency of switching</b> - for return drives - for interlocked drives	600 switches/h 12 switches/h
<b>Protection class for button drives</b> - NEF30-K, NEF30-W, NEF30-D, NEF30-DRP, NEF30-WR, NEF30-KL, NEF30-WL, NEF30-KLD, NEF30-WLD - NEF30-UK, NEF30-UW, NEF30-UD, NEF30-UKL, NEF30-UWL, NEF30-UKLD, NEF30-UWLD - NEF30-DR, NEF30-TP, NEF30-P, NEF30-TZ, NEF30-B - NEF30-UDR	IP 55 IP 65 IP 56 IP 66
<b>Cross-sections of terminals</b>	1x or 2x LY 0,75 – 1,5 mm <sup>2</sup> 1x or 2x DY 1,0 – 1,5 mm <sup>2</sup>
<b>Working temperature</b>	<b>N/2</b> -15...+30°C <b>W/3</b> -30...+50°C
<b>Working position</b>	any
<b>Minimum force for effective opening</b>	1,9N
<b>Travel of effective opening</b>	2,3 mm

The product conforms to the following standard PN-EN 60947-5-1. Drives of emergency interlocked buttons conform to standard PN-EN 60947-5-5.





## RETURN BUTTONS

	Type	Designation <sup>1</sup>	Colour	Weight [g] <sup>2</sup>
	Return drive with a covered button IP55	NEF30-K c NEF30-K z NEF30-K g NEF30-K s NEF30-K n NEF30-K b	red green yellow black blue white	75
	Return drive with a covered, sealed button IP65	NEF30-UK c NEF30-UK z NEF30-UK g NEF30-UK s NEF30-UK n NEF30-UK b	red green yellow black blue white	88
	Return drive with an extended button IP55	NEF30-W c NEF30-W z NEF30-W g NEF30-W s NEF30-W n NEF30-W b	red green yellow black blue white	75
	Return drive with an extended, sealed button IP65	NEF30-UW c NEF30-UW z NEF30-UW g NEF30-UW s NEF30-UW n NEF30-UW b	red green yellow black blue white	88
	Return drive with palm button IP55	NEF30-D c NEF30-D z NEF30-D g NEF30-D s	red green yellow black	79
	Return drive with palm, sealed button IP65	NEF30-UD c NEF30-UD z NEF30-UD g NEF30-UD s	red green yellow black	113

<sup>1</sup> When ordering the button, please specify the type of the switching element. You can complete the button with max. 6 current paths - any configuration X (NO) and Y (NC), eg NEF30-K c 2X2Y.

<sup>2</sup> The table shows the weight of the push button drive with the intermediate body, without switching elements.

**BACKLIT RETURN BUTTONS – WITH BULB<sup>3</sup>**





	Type	Designation <sup>1</sup>	Colour	Weight [g] <sup>2</sup>
	Return drive with a covered, backlit button  IP55	NEF30-KL c NEF30-KL z NEF30-KL g NEF30-KL n NEF30-KL b	red green yellow blue white	120
	Return drive with a covered, backlit, sealed button  IP65	NEF30-UKL c NEF30-UKL z NEF30-UKL g NEF30-UKL n NEF30-UKL b	red green yellow blue white	128
	Return drive with an extended, backlit button  IP55	NEF30-WL c NEF30-WL z NEF30-WL g NEF30-WL n NEF30-WL b	red green yellow blue white	106
	Return drive with an extended, backlit, sealed button  IP65	NEF30-UWL c NEF30-UWL z NEF30-UWL g NEF30-UWL n NEF30-UWL b	red green yellow blue white	133

<sup>1</sup> When ordering the button, please specify the type of the switching element. You can complete the button with max. 6 current paths - any configuration X (NO) and Y (NC), eg NEF30-KL c 2X2Y.

<sup>2</sup> The table shows the weight of the push button drive with the intermediate body, without switching elements.

<sup>3</sup> NEF30 backlit buttons work with the following bulbs: BA9s 6V, 12V, 24V, 48V – 2W and 130V, 230V – Max 3W.

**BACKLIT RETURN BUTTONS – WITH LED<sup>3</sup>**


	Type	Designation <sup>1</sup>	Colour	Weight [g] <sup>2</sup>
	Return drive with a covered, backlit button  IP55	NEF30-KLD c NEF30-KLD z NEF30-KLD g NEF30-KLD n NEF30-KLD b	red green yellow blue white	120
	Return drive with a covered, backlit, sealed button  IP65	NEF30-UKLD c NEF30-UKLD z NEF30-UKLD g NEF30-UKLD n NEF30-UKLD b	red green yellow blue white	128
	Return drive with an extended, backlit button  IP55	NEF30-WLD c NEF30-WLD z NEF30-WLD g NEF30-WLD n NEF30-WLD b	red green yellow blue white	106
	Return drive with an extended, backlit, sealed button  IP65	NEF30-UWLD c NEF30-UWLD z NEF30-UWLD g NEF30-UWLD n NEF30-UWLD b	red green yellow blue white	133

<sup>1</sup> When ordering the button, please specify the type of the switching element. You can complete the button with max. 6 current paths - any configuration X (NO) and Y (NC), eg NEF30-KLD c 2X2Y.

<sup>2</sup> The table shows the weight of the push button drive with the intermediate body, without switching elements.


<sup>3</sup> NEF30 backlit buttons work LED BA9s for 24V AC/DC, 230V AC.

## KNOB-OPERATED BUTTONS

	Type	Designation <sup>1</sup>	Colour	Weight [g] <sup>2</sup>
 <p>IP 56</p>	<b>0 – I</b> stable, knob's angle of rotation 90°	NEF30-TPa s NEF30-TPa c NEF30-TPa z NEF30-TPa g NEF30-TPa n	black red green yellow blue	75
	<b>0 ← I</b> unstable, knob's angle of rotation 90°	NEF30-TPb s NEF30-TPb c NEF30-TPb z NEF30-TPb g NEF30-TPb n	black red green yellow blue	75
	<b>I – 0 – II</b> stable, knob's angle of rotation 2x60°, contacts of the switch are switched separately	NEF30-TPc s NEF30-TPc c NEF30-TPc z NEF30-TPc g NEF30-TPc n	black red green yellow blue	75
	<b>I – 0 ← II</b> pos. I – stable, pos. II - unstable, knob's angle of rotation 2x60° contacts of the switch are switched simultaneously	NEF30-TPd s NEF30-TPd c NEF30-TPd z NEF30-TPd g NEF30-TPd n	black red green yellow blue	75
	<b>I → 0 ← II</b> unstable, knob's angle of rotation 2x60°, contacts of the switch are switched separately	NEF30-TPe s NEF30-TPe c NEF30-TPe z NEF30-TPe g NEF30-TPe n	black red green yellow blue	75
	<b>I – 0 ← II</b> pos. I – stable, pos. II - unstable, knob's angle of rotation 2x60°, contacts of the switch are switched separately	NEF30-TPf s NEF30-TPf c NEF30-TPf z NEF30-TPf g NEF30-TPf n	black red green yellow blue	75

<sup>1</sup> When ordering the button, please specify the type of the switching element. You can complete the button with max. 6 current paths - any configuration X (NO) and Y (NC), eg NEF30-TPa c 2X2Y.


<sup>2</sup> The table shows the weight of the push button drive with the intermediate body, without switching elements.

	Type	Designation <sup>1</sup>	Colour	Weight [g] <sup>2</sup>
 <p>IP56</p>	<b>0 – I</b> stable, knob's angle of rotation 90°	NEF30-P s NEF30-P c NEF30-P z NEF30-P g NEF30-P n	black red green yellow blue	79

<sup>1</sup> When ordering the button, please specify the type of the switching element. You can complete the button with max. 6 current paths - any configuration X (NO) and Y (NC), eg NEF30-P c 2X2Y.

<sup>2</sup> The table shows the weight of the push button drive with the intermediate body, without switching elements.

### KNOB-OPERATED RETURN BUTTON<sup>3</sup>


	Type	Designation <sup>1</sup>	Colour	Weight [g] <sup>2</sup>
 IP 55	<b>0 – I</b> stable, knob's angle of rotation 90°	NEF30-P s	black	81
		NEF30-P c	red	
		NEF30-P z	green	
		NEF30-P g	yellow	
		NEF30-P n	blue	

<sup>1</sup> When ordering the button, please specify the type of the switching element. You can complete the button with max. 6 current paths - any configuration X (NO) and Y (NC), eg NEF30-WR c 2X2Y.

<sup>2</sup> The table shows the weight of the push button drive with the intermediate body, without switching elements.

<sup>3</sup> NEF30-WR button can be activated, either by pressing or turning the button. The button automatically returns to the unforced position, when released. The button remains in the forced position, if turned clockwise by 90°. To unlock the button, turn it counterclockwise to the unforced position.


### LOCK-OPERATED BUTTONS<sup>3</sup>

	Type	Designation <sup>1</sup>	Weight [g] <sup>2</sup>
 IP 56	<b>0 – I</b> stable, key's angle of rotation 90°	NEF30-TZaM	130
	<b>0 ← I</b> unstable, key's angle of rotation 90°	NEF30-TZbM	130
	<b>I – 0 – II</b> stable, key's angle of rotation 2x60°, contacts of the switch are switched separately	NEF30-TZcM	130
	<b>I – 0 ← II</b> pos. I – stable; pos. II - unstable, key's angle of rotation 2x60°, contacts of the switch are switched simultaneously	NEF30-TZdM	130
	<b>I → 0 ← II</b> unstable, key's angle of rotation 2x60°, contacts of the switch are switched separately	NEF30-TZeM	130
	<b>I – 0 ← II</b> pos. I – stable; pos. II - unstable, key's angle of rotation 2x60°, contacts of the switch are switched separately	NEF30-TZfM	130

<sup>1</sup> When ordering the button, please specify the type of the switching element. You can complete the button with max. 6 current paths - any configuration X (NO) and Y (NC), eg NEF30-TZaM 2X2Y.

<sup>2</sup> The table shows the weight of the push button drive with the intermediate body, without switching elements.

<sup>3</sup> The key can be removed at position "0" exclusively.




	Type	Designation <sup>1</sup>	Weight [g] <sup>2</sup>
 IP 56	<b>0 – I</b> stable, key's angle of rotation 90°	NEF30-B	143

<sup>1</sup> When ordering the button, please specify the type of the switching element. You can complete the button with max. 6 current paths - any configuration X (NO) and Y (NC), eg NEF30-B 2X2Y.

<sup>2</sup> The table shows the weight of the push button drive with the intermediate body, without switching elements.

<sup>3</sup> If a NEF30-B button is turned clockwise to position "I", the key is locked in the forced position. To unlock, turn the key counter-clockwise to position "0". The key can be removed at position "0" exclusively.

## EMERGENCY INTERLOCKED PALM DRIVES

	Type	Designation <sup>1</sup>	Colour	Weight [g] <sup>2</sup>
 IP55	Interlocked palm drive, unlocked by rotating the button	NEF30-DRP c	red	183
 IP56	Interlocked palm drive, unlocked by extending the button	NEF30-DR c	red	152
 IP66	Interlocked palm drive, sealed, unlocked by extending the button	NEF30-UDR c	red	157

<sup>1</sup> When ordering the button, please specify the type of the switching element. You can complete the button with max. 6 current paths - any configuration X (NO) and Y (NC), eg NEF30-DRP c 2X2Y.

<sup>2</sup> The table shows the weight of the push button drive with the intermediate body, without switching elements.

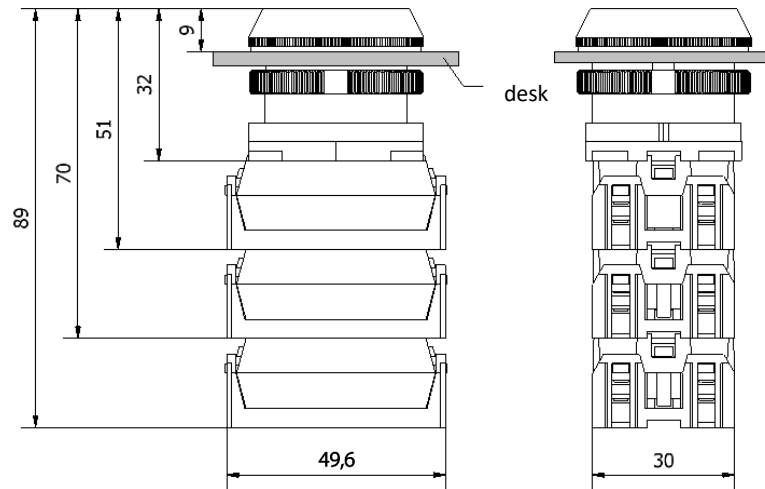


**SWITCHING ELEMENTS EF30**

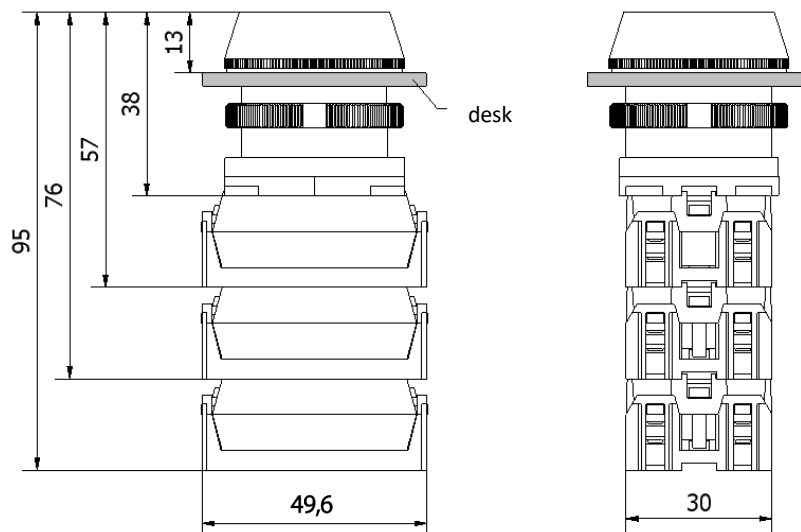
					
<b>Type of EF30</b>	X NO	Y NC	XY NO i NC	2X 2 NO	2Y 2 NC
<b>Weight [g]<sup>4)</sup></b>	22	22	28	28	28

<sup>4</sup> Weight of connecting elements provided with screws.

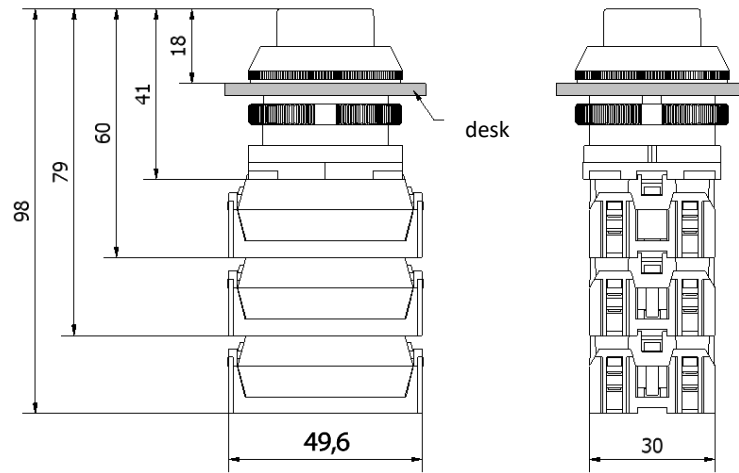
## DIMENSIONS



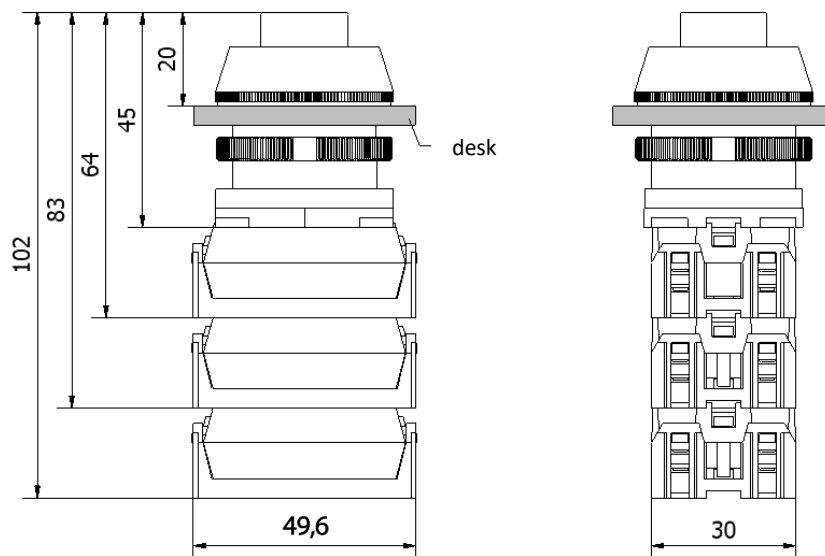
NEF30-K



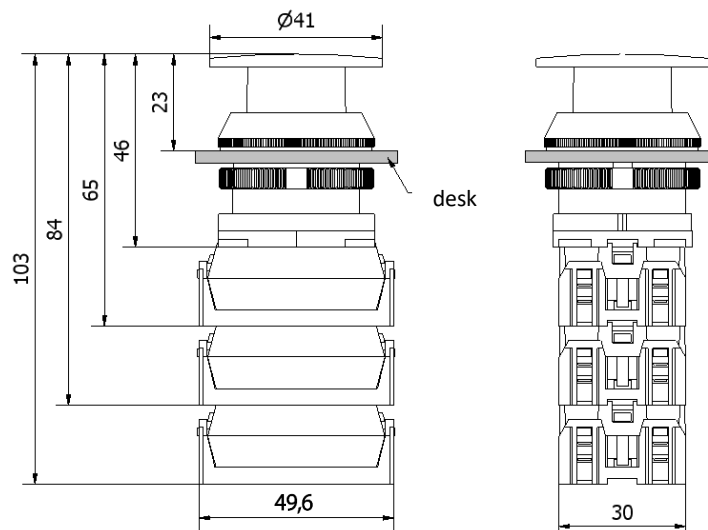
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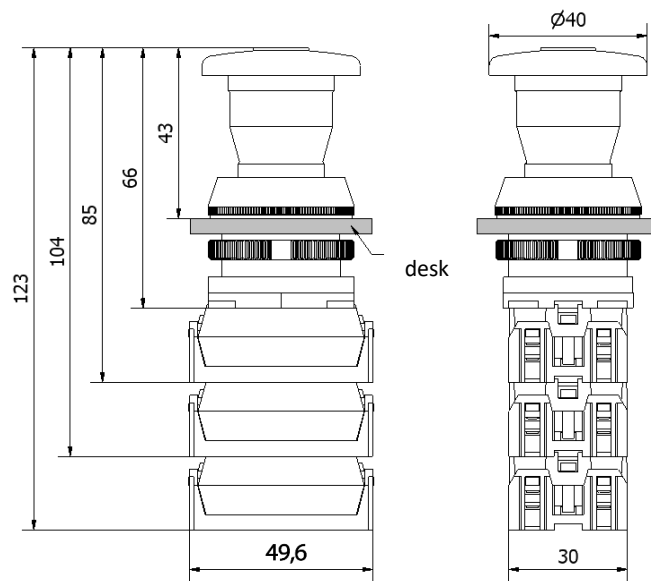
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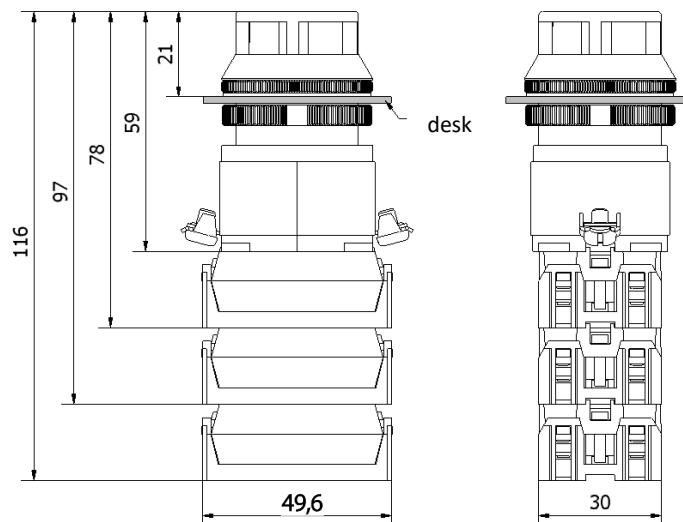
NEF30-UW



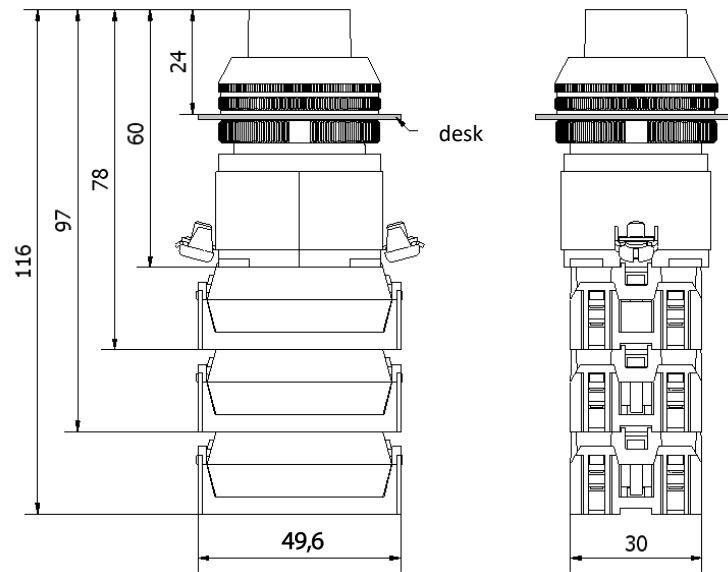
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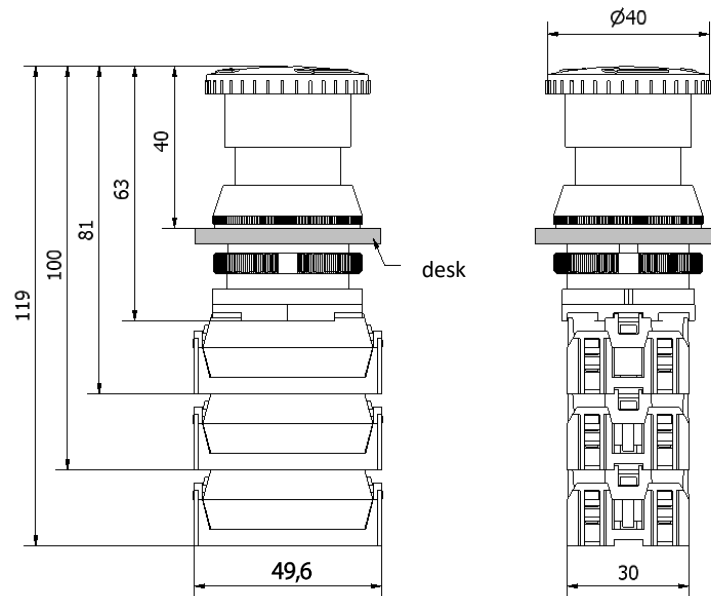
NEF30-UD



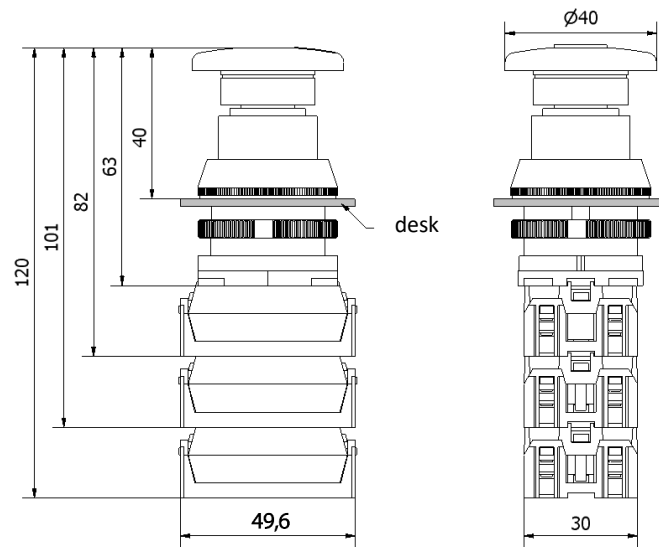
NEF30-KL, NEF30-KLD, NEF30-UKL, NEF30-UKLD



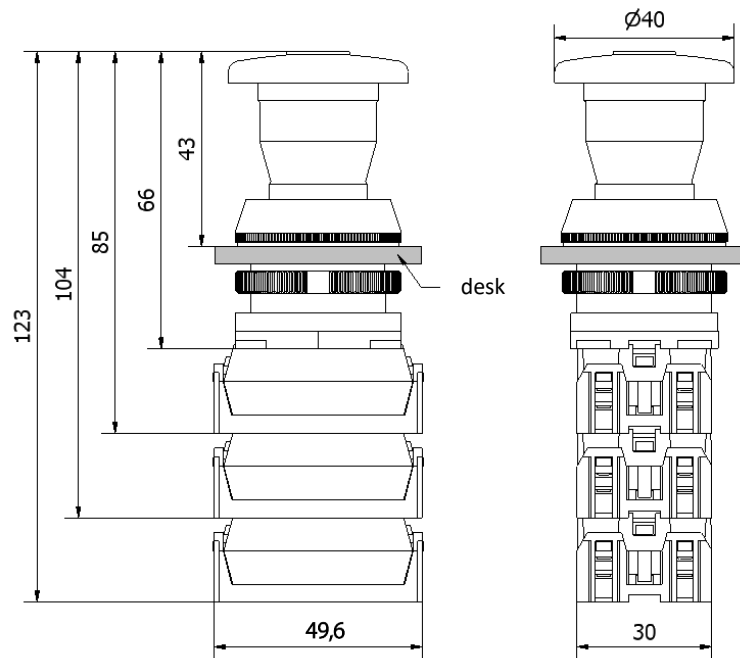
NEF30-WL, NEF30-WLD, NEF30-UWL, NEF30-UWLD



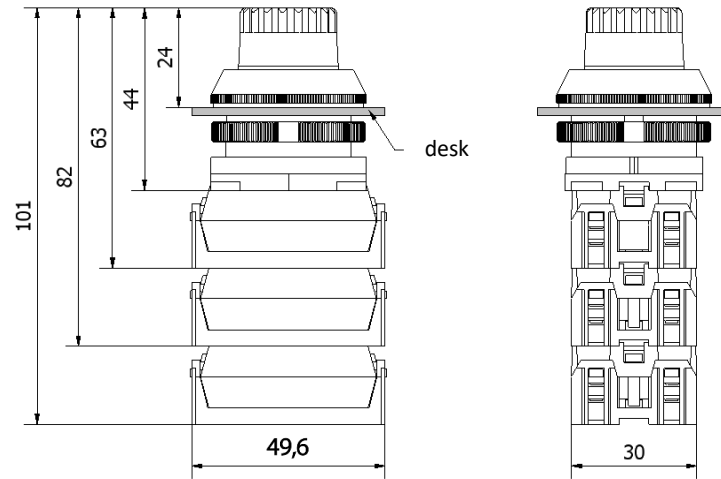
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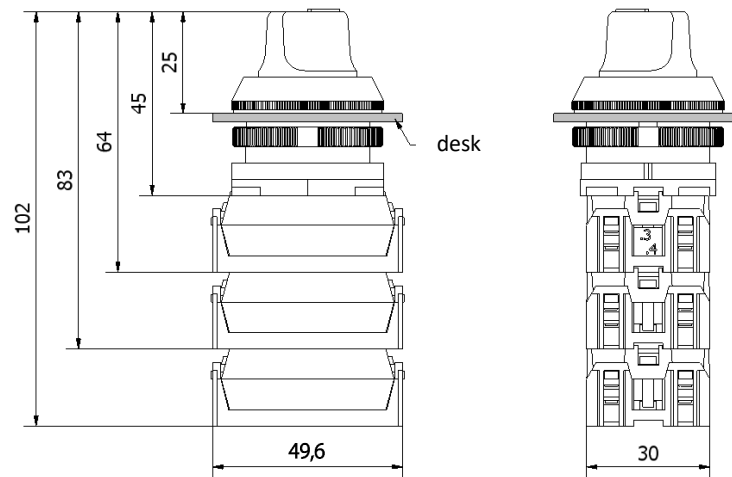
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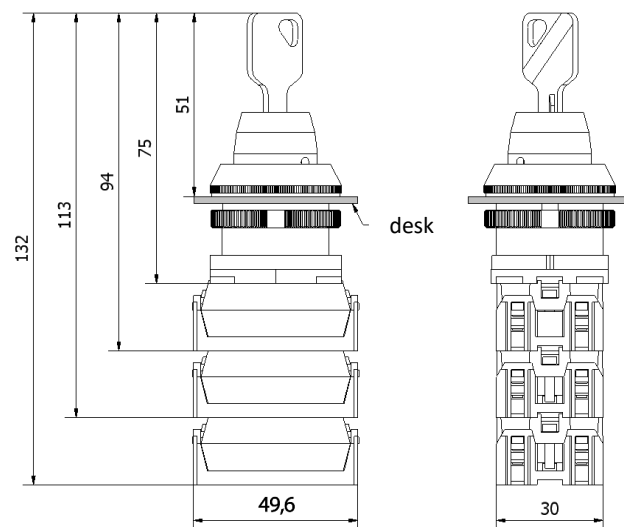
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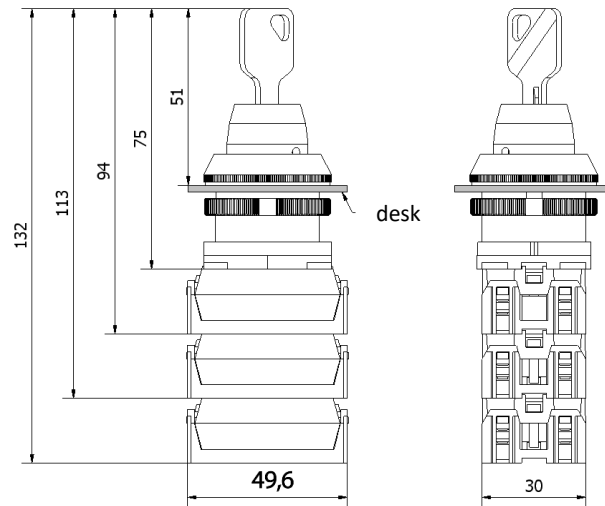
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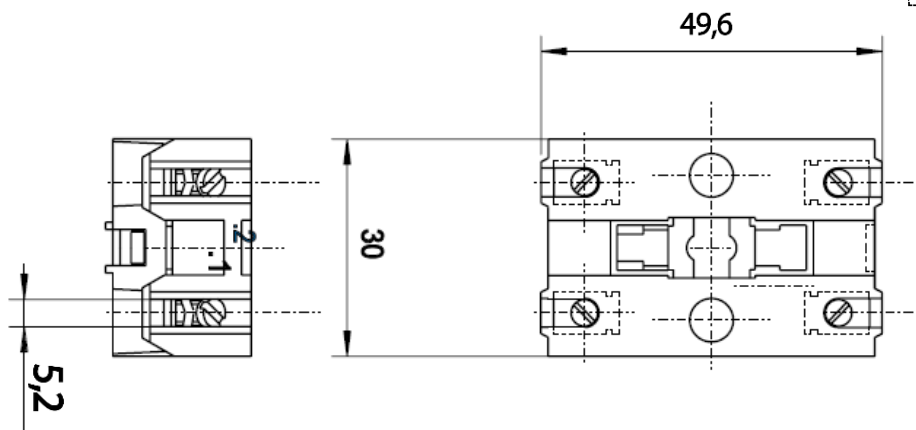
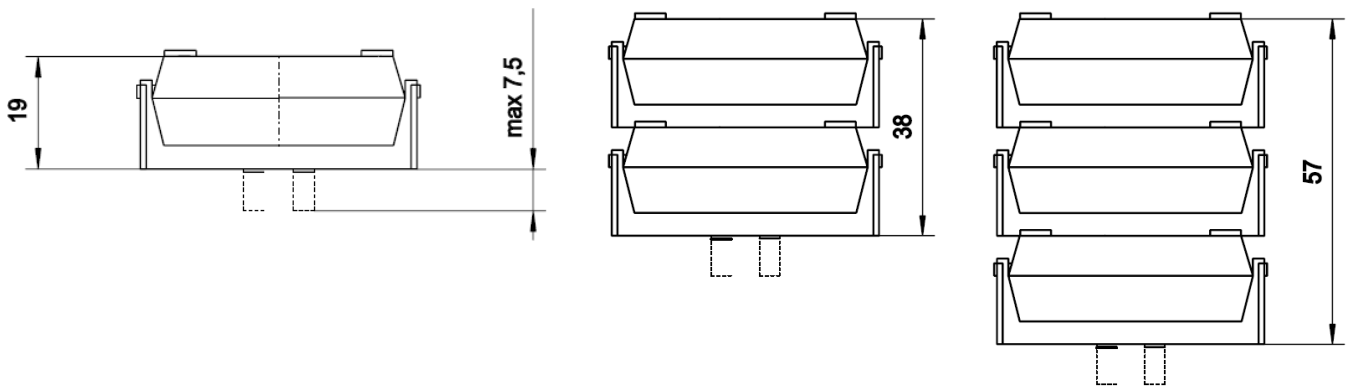
NEF30-TP



NEF30-B

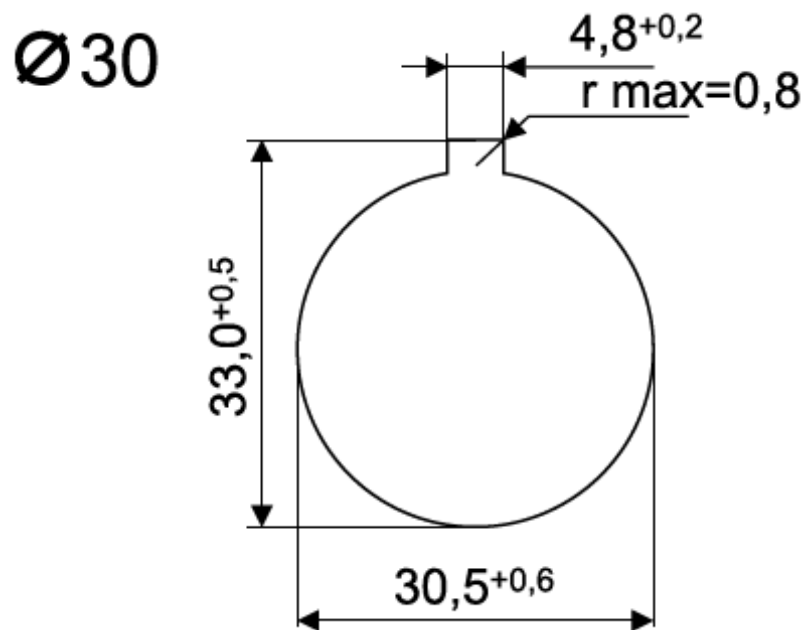
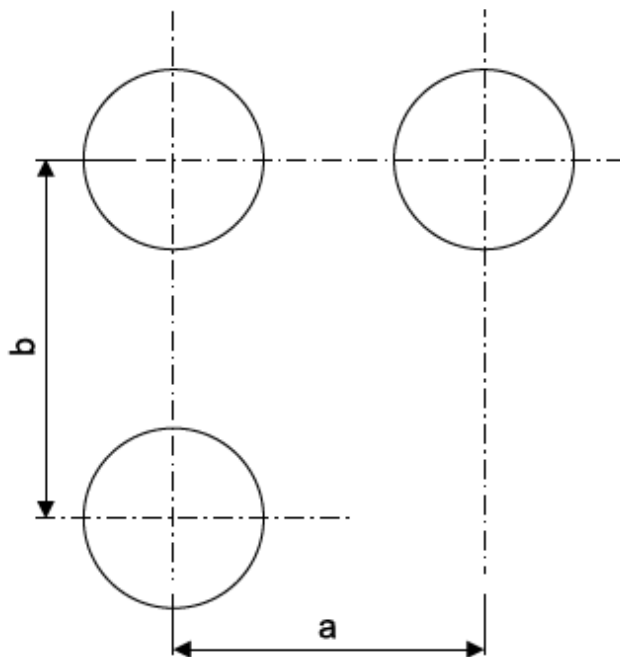


NEF30-TZ



EF30



**Assembly holes**

**Min. distances [mm]**


a [mm]	b [mm]
50	65