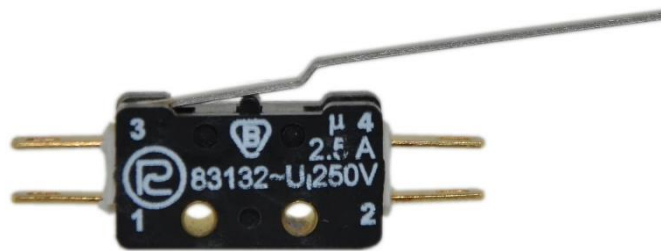


# MINIATURE LIMIT SWITCHES 83 132

## DATA SHEET

no: KK- ŁK\_83132



Miniature limit switches are controlled with an appropriate drive element. The position and speed of movement corresponding to mobile contacts, and the time needed to switch them over, depend on the position and speed of travel corresponding to the drive element that acts on the pusher with an appropriate force. This way, appropriate contacts of the switch are either closed or opened. The arrangement of mobile contacts is not stable, which means that they automatically return to their home position, once the force acting on the pusher disappears.

Miniature limit switches with manual drive are intended to be used in automated drive systems and control, monitoring, and measuring circuits that operate under alternating and direct currents.

Miniature limit switches with manual drive feature the following primary qualities:



- Compact size
- Small force required to control
- High repeatability of parameters
- High electrical and mechanical endurance
- A variety of available drives.

## TECHNICAL DATA:



Parameter	Value
<b>Rated insulation voltage <math>U_i</math></b>	250V
<b>Rated switching voltage <math>U_e/I_e</math></b> AC15 [V/A] DC13 [V/A]	230/2,5A (50-60 Hz) 220/0,3
<b>Rated continuous current <math>I_u</math></b>	6A
<b>Rated limited withstand current when working with a Bi-Wts fuse that operates under the rated current of 10A</b>	1000
<b>Mechanical life:</b> - For single- and double-break switches without an additional drive - For single- and double-break switches with an additional drive	1x10 <sup>7</sup> 0,5x10 <sup>7</sup>
<b>Electrical endurance:</b> AC15 DC13	85x10 <sup>3</sup> 30x10 <sup>3</sup>
<b>Rated frequency of switching [switches/h]</b>	3600
<b>Speed of the drive element [m/s]</b>	17x10 <sup>-6</sup> - 1
<b>Cross-section of terminals [mm<sup>2</sup>]</b>	0,75...1,5
<b>Ambient temperature</b>	-25...+40
<b>Protection class of the body/of terminals</b>	IP40/IP00
<b>Operation of contacts</b>	snap action

The product conforms to the following standard PN-EN 60947-5-1.

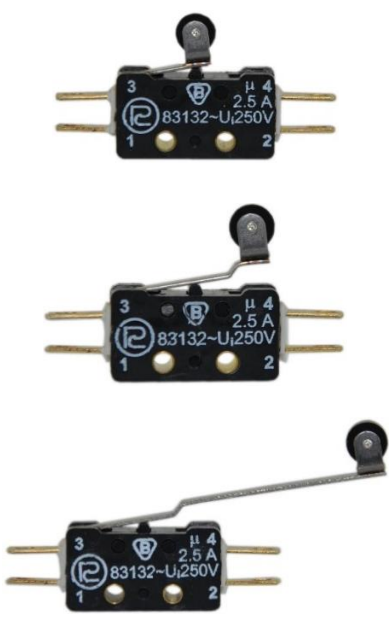
**TYPES OF MINIATURE LIMIT SWITCHES 83 132**

	Designation	Description	Weight [g]
	83 132	Basic switch with a double-break change-over contact of the same polarity, with four terminals running perpendicularly to the longitudinal axis of the drive element; with sleeves in assembly holes, and with gold-plated terminals	1,9
	83 132s	Basic miniature switch..., with silver-plated terminals	1,9


**TYPES OF MINIATURE LIMIT SWITCHES 83 132 54 AR**

	Designation	Description	Weight [g]
	83 132 54 AR-7,7 83 132 54 AR-14,75 83 132 54 AR-35,75	Switches type 83 132, with an additional drive, controlled with a flat lever, with gold-plated terminals	2,0 2,1 2,3
	83 132s 54 AR-7,7 83 132s 54 AR-14,75 83 132s 54 AR-35,75	Switches type 83 132s..., with silver-plated terminals	2,0 2,1 2,3


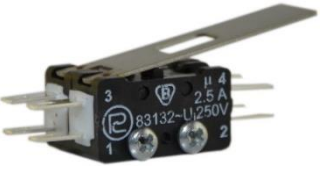
**TYPES OF MINIATURE LIMIT SWITCHES 83 132 54 ER**

	Designation	Description	Weight [g]
	83 132 54 ER-7,7 83 132 54 ER-14,1 83 132 54 ER-34,4	Switch type 83 132, controlled with a flat lever and a roll located in the axis of the lever; with goldplated terminals	2,3 2,3 2,6
	83 132s 54 ER-7,7 83 132s 54 ER-14,1 83 132s 54 ER-34,4	Switches type 83 132s..., with silver-plated terminals	2,3 2,3 2,6


**TYPES OF MINIATURE LIMIT SWITCHES 83 132 54 KR**

	Designation	Description	Weight [g]
	83 132 54 KR-9,3 83 132 54 KR-15,4 83 132 54 KR-35,0	Switch type 83 132, controlled with a flat lever and a roll located across the axis of the lever; with gold-plated terminals	2,3 2,3 2,6
	83 132s 54 KR-9,3 83 132s 54 KR-15,4 83 132s 54 KR-35,0	Switches type 83 132s..., with silver-plated terminals	2,3 2,3 2,6

**TYPES OF MINIATURE LIMIT SWITCHES 83 132 54 A2**

	Designation	Description	Weight [g]
	83 132 54 A2	A set of two switches type 83 132, controlled with a flat lever, with gold-plated terminals	5,8
	83 132s 54 A2	A set of two switches type 83 132s..., with silver-plated terminals	5,8

**TYPES OF MINIATURE LIMIT SWITCHES 83 132 54 A3**

	Designation	Description	Weight [g]
	83 132 54 A3	A set of three switches type 83 132, controlled with a flat lever, with gold-plated terminals	8,7
	83 132s 54 A3	A set of three switches type 83 132s..., with silver-plated terminals	8,7

## FORCES AND TRAVELS OF MINIATURE SWITCHES

### Łączniki 83 132, 83 132s

Position of operation	Force and travel required to switch over		Travel after switching over	Differential travel	Force required to switch back	Permissible driving force
PA [mm]	FC max [N]	CA max [mm]	CRA min [mm]	CD [mm]	FR min [N]	FFC max [N]
7.7 <sup>±0.2</sup>	1.6	0,7	0.3	0.35 <sup>±0.1</sup>	0.4	10

### Miniature switches 83 132, 83 132s with additional drives

Type of switch	Active length of lever	Travel to switch over	Position of operation	Force needed to activate
	R [mm]	CA max [mm]	PA [mm]	FC max [N]
54A	7,7 <sup>±0.2</sup>	1,1	8,2 <sup>±0.8</sup>	1,55
	14,75 <sup>±0.3</sup>	2,15	9,5 <sup>±0.8</sup>	0,8
	35,75 <sup>±0.5</sup>	5,15	10 <sup>±1.5</sup>	0,34
54E	7,5 <sup>±0.2</sup>	1,1	14,7 <sup>±0.8</sup>	1,6
	14,1 <sup>±0.3</sup>	2,05	15,6 <sup>±0.8</sup>	0,8
	34,4 <sup>±0.5</sup>	5,4	15,6 <sup>±1.4</sup>	0,34
54K	9,3 <sup>±0.3</sup>	1,35	14,7 <sup>±0.8</sup>	1,6
	15,4 <sup>±0.3</sup>	2,3	15,6 <sup>±0.8</sup>	0,75
	35 <sup>±0.5</sup>	5,05	16,1 <sup>±1.4</sup>	0,33
54A2	30 <sup>±0.5</sup>	4,3	10,65 <sup>±2.8</sup>	0,8
54A3	30 <sup>±0.5</sup>	4,3	10,65 <sup>±2.8</sup>	1,2

**DIMENSIONS**
