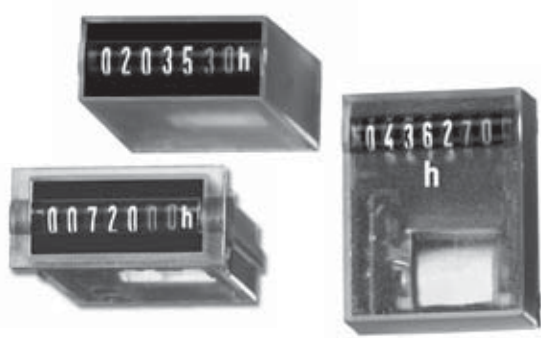


# Hour meters / timers, electromechanical

<b>Micro timers</b>	<b>Many different installation options (DC)</b>	<b>HK 07 / AHK 07</b>
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The micro timers of the HK 07 and AHK 07 families offer a particularly large number of variants and can be used in many different applications thanks to their wide voltage range from 4.5 to 35 V DC.

Available as panel, base and PCB mount versions, they can be used in many different fields of application. Thanks to their encapsulated housing, these non-resettable counters are extremely tamper-proof.

Hour meters / Timers

<p><b>Characteristics</b></p> <ul style="list-style-type: none"> <li>• 7-digit micro hour meter</li> <li>• High shock and impact resistance</li> <li>• Low power consumption; suitable for battery operation</li> <li>• Small dimensions – magnified large figures</li> <li>• Panel-mount counter with integrated spring clip</li> <li>• PCB-mount counter</li> <li>• Machine-solderable and wash-proof</li> <li>• Protection IP65</li> </ul>	<p><b>Benefits</b></p> <ul style="list-style-type: none"> <li>• Wide voltage range 4.5 ... 35 V DC</li> <li>• Count retention in case of power failure</li> <li>• Long service life</li> </ul> <p><b>Applications</b></p> <p>General time measurement, maintenance intervals for measuring instruments (respiration units, oxygen, dialysis), small appliances, UV lamps, display panels in vehicles</p>
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## Type series

Fig.	Mounting options	Display	Protection	El. connection	Housing	Height of fig.	Type
1)	Panel mount with latch	front side	IP65, front side	flying leads	plastic	4 mm	<b>HK 07.20</b>
2)	PCB mount, lying	on the top	IP65, front side/on rear	solder pins	plastic	4 mm	<b>HK 07.90</b>
4)	PCB mount, upright	front side	IP65, front side/on rear	solder pins	plastic	4 mm	<b>HK 07.92</b>
5)	Base mount, upright	front side	IP40	flying leads	plastic	4 mm	<b>AHK 07.00</b>

### Mounting options and position of the display

<p>1) Panel mount / display front side</p>	<p>2) PCB mount, lying / display on the top</p>	<p>3) PCB mount, upright / display front side</p>
<p>4) Base mount, upright / display front side</p>	<p>Optional: PCB mount, hanging / display front side</p>	

# Hour meters / timers, electromechanical

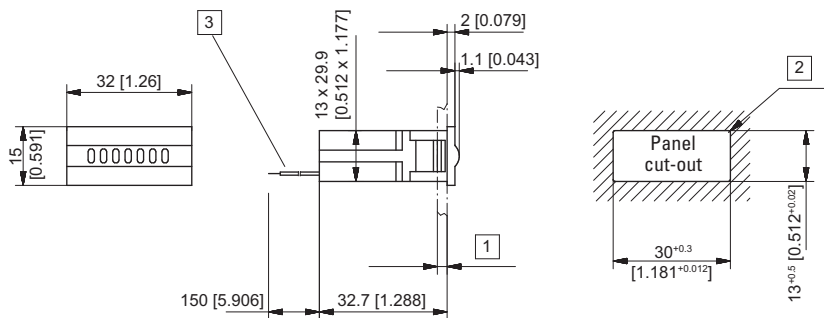
<b>Micro timers</b>	<b>Many different installation options (DC)</b>	<b>HK 07 / AHK 07</b>
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Technical data		
<b>Electrical connection</b>	panel mount	flying leads, AWG 22 (red +, black -) approx. 150 mm, 6 mm stripped wire ends, tinned
	PCB mount	solder pins 0.4 x 1.2 mm, tinned
<b>Power consumption</b> (every 36 s with a pulse length of 32 ms)		at $U_B = 5\text{ V DC}$ typ. 82 mW at $U_B = 12\text{ V DC}$ typ. 135 mW at $U_B = 24\text{ V DC}$ typ. 135 mW max. 170 mW
<b>Rated voltage</b>		4.5... 35 V DC
<b>Residual ripple</b>		< 1 %
<b>Current consumption</b>		< 1.5 mA (average)
<b>On time</b>		100 %
<b>Pulse duration</b>		32 ms; every 36 s = 0.01 h On-times < 36 s will not be counted
<b>Number of digits</b>		7: 99999.99 h
<b>Accuracy</b>		22.5 ppm at 25°C

<b>Height of figures</b>	1.2 x 4.0 mm
<b>Colour of figures</b>	white and red on black
<b>Reset</b>	no reset
<b>Operating temperature</b>	-10°C ... +60°C (non-condensing)
<b>Mounting position</b>	horizontal, other on request
<b>Solderable and washproof versions</b>	HK 07.90, HK 07.91, HK 07.92
<b>Soldering temperature</b>	265°C, 3 s
<b>Protection</b>	up to IP65 depending on kind of type
<b>EMC</b>	Emitted interference EN 55011 class B Immunity to interference EN 61000-6-2
<b>Housing</b>	plastic PC (Polycarbonate)
<b>Weight</b>	15 ... 18 g

**Options**  
HK 07.20 flat pin 0.8 x 2.8 mm (other on request)

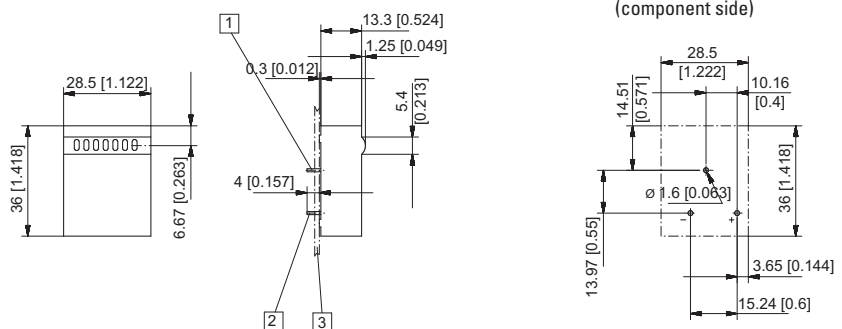
## Panel mount with latch / display front side Type HK 07.20



1] 1.2 ... 3 mm    2]  $R_{max} 0.5$     3] Flying leads (red+ / black-)

Type	Display	Art.-No.
		4.5 ... 35 V DC
<b>HK 07.20</b>	7 digits	<b>3.100.200.383</b> <sup>1)</sup>
<b>HK 07.20.35</b> with flat pins	7 digits	<b>3.107.200.383</b> <sup>1)</sup>

## PCB mount, lying / display on the top Type HK 07.90



1] Mounting pin without el. function 0.4 x 1.2 mm    2] Electrical connection 0.4 x 1.2 mm    3] PCB

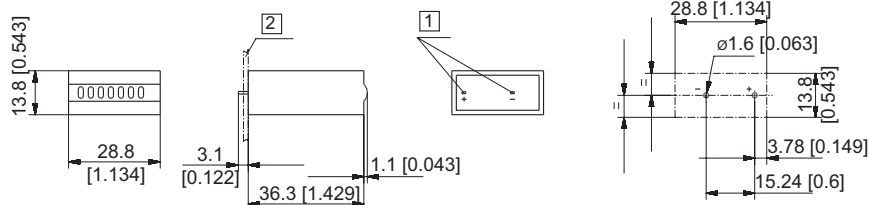
Type	Display	Art.-No.
		4.5 ... 35 V DC
<b>HK 07.90</b>	7 digits	<b>3.100.900.383</b>

# Hour meters / timers, electromechanical

**Micro timers**      **Many different installation options (DC)**      **HK 07 / AHK 07**

**PCB mount, upright / display front side**  
**Type HK 07.92**

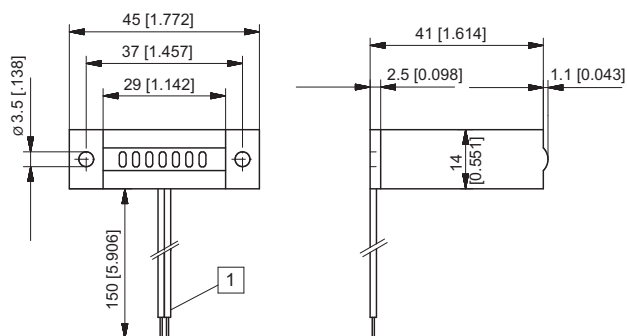
Punching diagram for PCB  
(component side)



1 Electrical connection 0.4 x 1.2 mm    2 PCB

Type	Display	Art.-No.
HK 07.92	7 digits	3.100.920.383

**Base mount, upright / display front side**  
**Type AHK 07.00**



1 Flying leads (red+ / black-)

Type	Display	Art.-No.
AHK 07.00	7 digits	3.100.000.383