

# HK series

Hour meters



# HK 30

## Hour meter



### Highlights

- ▶ Price competitive meter
- ▶ Excellent quality
- ▶ Long lifetime
- ▶ Different models for different markets
- ▶ All necessary approvals
- ▶ Your branding available

### Applications

- ▶ Gen-sets
- ▶ Compressors
- ▶ Pumps
- ▶ Medical equipment
- ▶ Control panels
- ▶ Air conditioning

**Mechanical data**

Front dimension	36 × 24 mm (standard)
Display	AC: 5 integers, 2 decimals DC: 6 integers, 1 decimal without reset
Digit height	4 mm
Digit color	integer: white on black decimal: 50 Hz - red on black 60 Hz - black on white
Counting range	AC: 99999,99 h, DC: 999999,9 h
Reading accuracy	AC: 1/100 h (36 sec) DC: 1/10 h (6 min)
Weight	ca. 32 g
Housing color	standard black transparent on request
Bezels for 36 × 24 mm	48×24, 48×48, 54×29, 55×55, Ø 58, Ø 72, 72×72 mm
Mounting options	D - DIN housing E - 48 × 48 DIN case G - front 36 × 24 mm with retainer R - front 40,6 × 27,5 mm (1,60 × 1,08") with retainer S - 2-screw front 52 × 26 mm (2,05 × 1,03")

**Electrical data**

Operating voltage	24, 48, 60, 110, 120, 220, 230, 240, 400 VAC ± 10%, 50 or 60 Hz 6-12, 12-36, 36-80, 110, 220 VDC ± 10%
Current consumption	AC: max. 8 mA DC: max. 9 mA
Accuracy	AC: ± 0,02 % DC: ± 0,002 %
Connection	flat pin 6,3×0,8 with screw flat pin 6,3×0,8

**Ambient conditions**

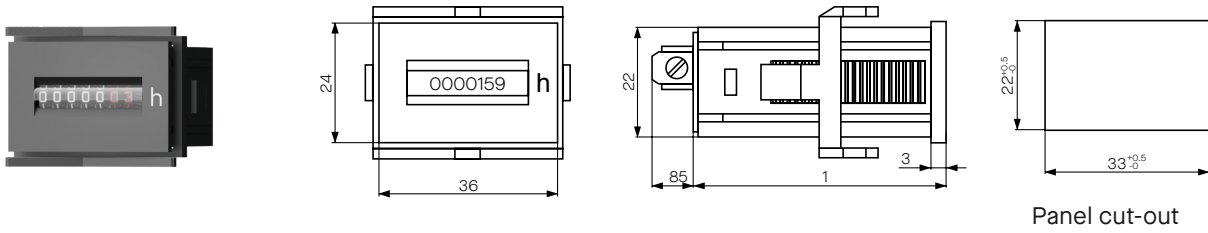
Operating temperature	AC: -250 °C .. +700 °C DC: -100 °C .. +550 °C
Storage temperature	AC: -400 °C .. +700 °C DC: -200 °C .. +700 °C
Relative humidity	max. 80% at +250 °C
Protection	IP40 front IP67 front (transparent housing) IP67 totally sealed housing IPO0 terminals
Approvals	CE Mark UL E171200*  RoHS compliant

\* For UL certified version please specify when ordering

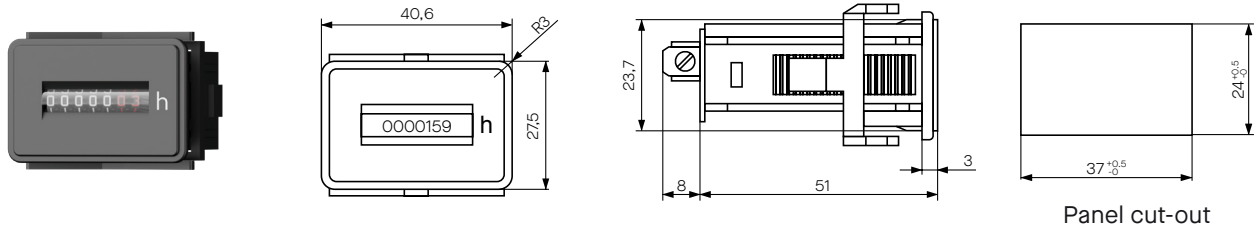
**Ordering**
**HK 30 . X X / X X X / X X X**

Mounting	Bezel for 36 × 24 front	Protection	Connection	Package	Voltage (specify)	Frequency	Optional
D - DIN housing	0 - none	1 - IP40 front	1 - flat pin	P - single	24, 48, 60, 110,	50 Hz	UL
E - 48 × 48 DIN case	1 - 48 × 24 mm	2 - IP67 front	6,3 × 0,8	S - group	120, 220, 230,	60 Hz	
G - front 36 × 24 mm with retainer	2 - 48 × 48 mm	3 - IP67 total	with screws		240, 400 VAC		
R - front 40,6 × 27,5 mm (1,60 x 1,08") with retainer	3 - 54 × 29 mm		2 - flat pin		6-12, 12-36, 36-80,		
S - 2-screw front 52 × 26 mm (2,05 × 1,03")	4 - 55 x55 mm		6,3 × 0,8		110, 220 VDC		
	5 - Ø 58 mm						
	6 - Ø 78 mm						
	7 - 72 × 72 mm						

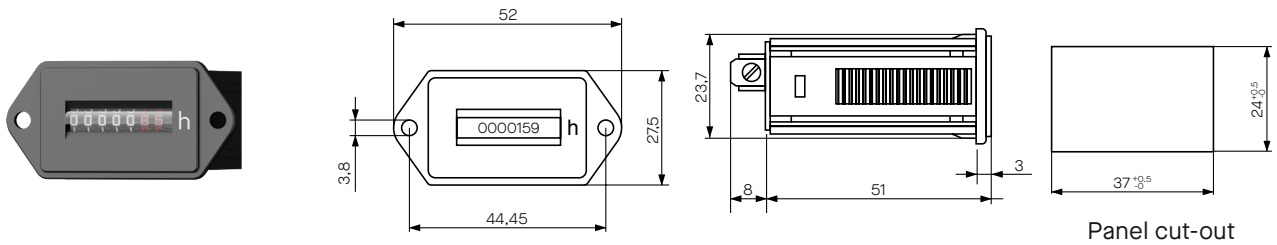
HK 30 - mounting G



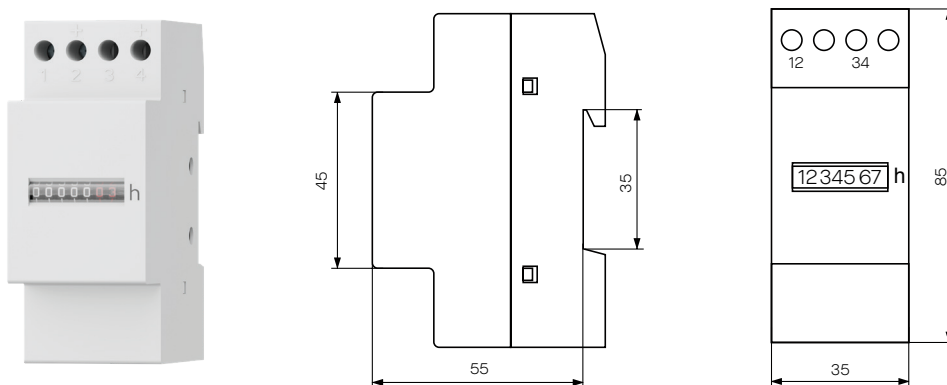
HK 30 - mounting R



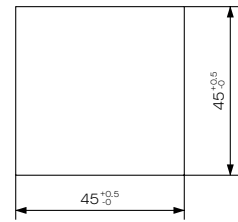
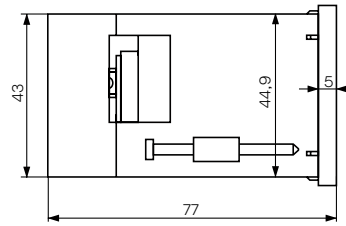
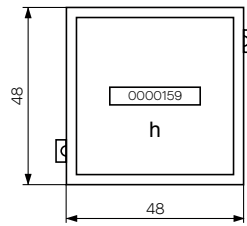
HK 30 - mounting S



HK 30 - mounting D

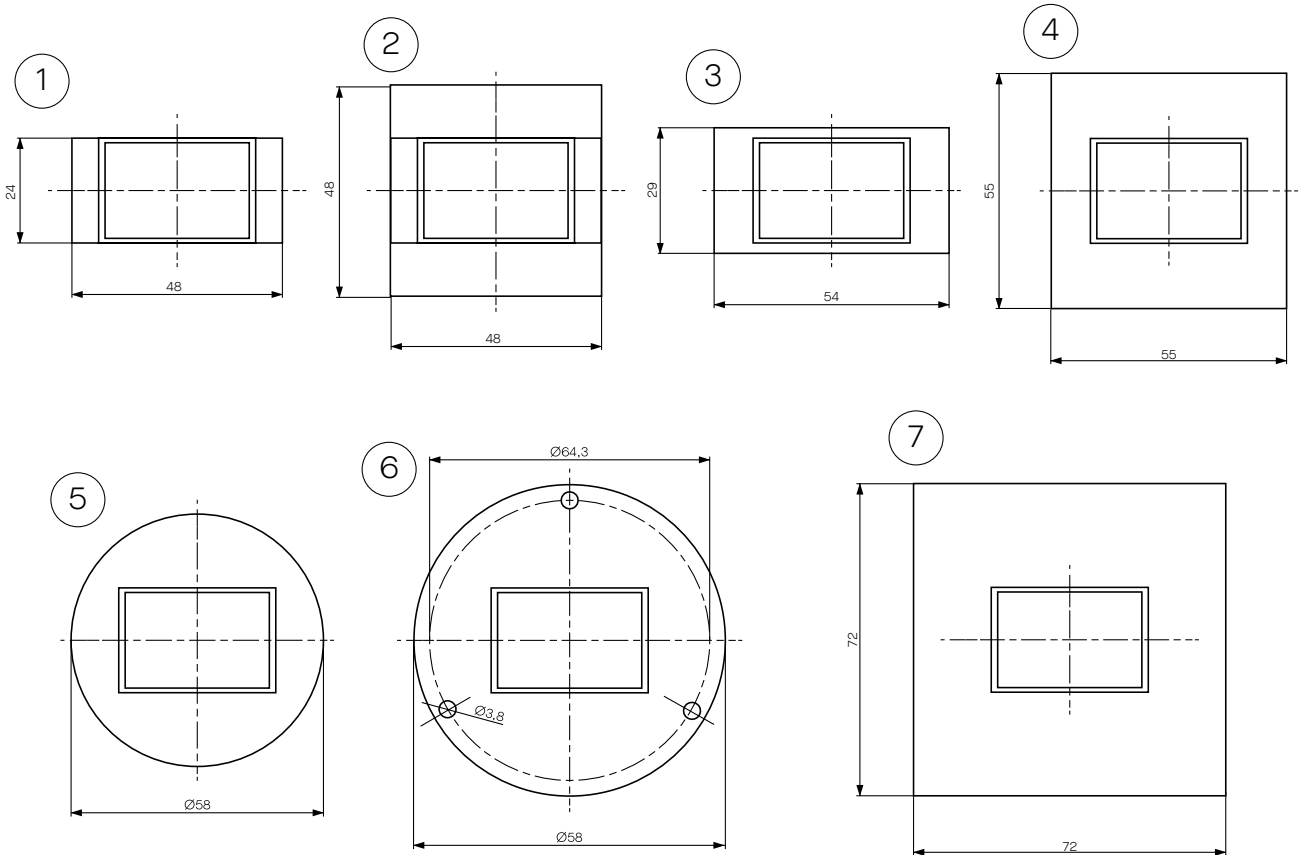


HK 30 - mounting E



Panel cut-out

HK 30 bezels - for 36 × 24 mm front meter



Bezel No.	Bezel size	Panel cut-out	Retainer size
1	48 × 24 mm	45 × 22 mm	standard
2	48 × 48 mm	45 × 45 mm	bigger
3	54 × 29 mm	50 × 25 mm	standard
4	55 × 55 mm	45 × 45 or Ø 50 mm	bigger
5	Ø 58 mm	Ø 50 mm	bigger
6	Ø 72 mm	min. Ø 50 mm	standard
7	72 × 72 mm	45 × 45 or Ø 50 mm	bigger

# HK 46

## Hour meter



### Highlights

- ▶ Price competitive meter
- ▶ Excellent quality
- ▶ Long lifetime
- ▶ Different bezels for different cut-outs
- ▶ Many mounting versions
- ▶ All necessary approvals
- ▶ Your branding available

### Applications

- ▶ Gen-sets
- ▶ Compressors
- ▶ Pumps
- ▶ Medical equipment
- ▶ Control panels
- ▶ Air conditioning

Mechanical data	
Front dimension	48 × 48 mm
Display	AC: 5 integers, 2 decimals DC: 6 integers, 1 decimal AC indicator, without reset
Digit height	4 mm
Digit color	integer: white on black decimal: 50 Hz - red on black 60 Hz - black on white
Counting range	AC: 99999,99 h, DC: 999999,9 h
Reading accuracy	AC: 1/100 h (36 sec) DC: 1/10 h (6 min)
Weigth	50 g
Housing color	standard black
Bezels for 36 × 24 mm	52 × 52 55 × 55 727 × 72 and Ø 80 mm
Mounting options	A - aluminum clamp C - anti-vibration boot & clamp D - DIN rail F - snap fastener G - retainer

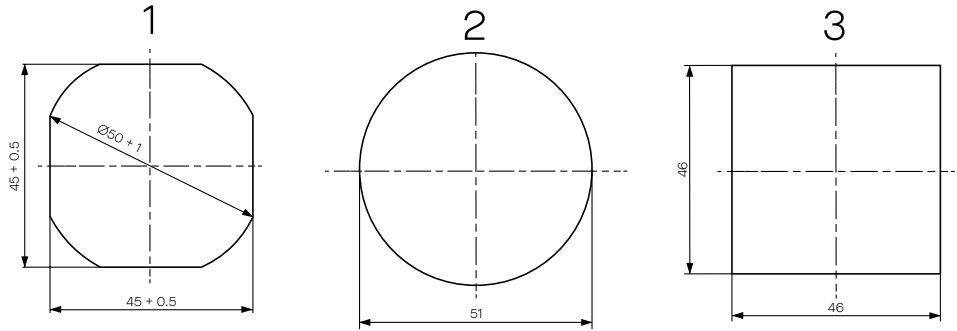
Electrical data	
Operating voltage	24, 48, 110, 120, 220, 230, 240, 400 VAC ± 10%, 50 or 60 Hz 6-30, 10-80, 110, 220 VDC ± 10%
Current consumption	AC: max. 8 mA DC: max. 9 mA
Accuracy	AC: ± 0,02 % DC: ± 0,002 %
Connection	flat pin 6,3×0,8 with screw flat pin 6,3×0,8 screw terminal

Ambient conditions	
Operating temperature	AC: -25 °C .. +80 °C DC: -20 °C .. +70 °C
Storage temperature	AC: -40 °C .. +80 °C DC: -20 °C .. +70 °C
Relative humidity	max. 80% at +25 °C
Protection	IP40 front IP67 front (on request) IP20 terminals
Approvals	CE Mark UL E171200*
	RoHS compliant

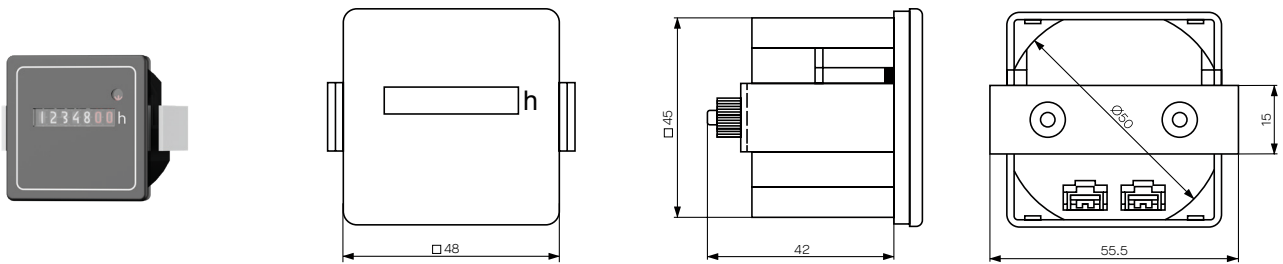
\* For UL certified version please specify when ordering

Ordering							
HK 46 . X X / X X X / X X X							
Mounting	Front dimension	Front protection	Connection	Package	Voltage (specify)	Frequency	Optional
A - aluminum clamp	1 - 48 × 24 mm	1 - IP40	1 - flat pin 6,3 × 0,8 with screw	P - single	24, 48, 60, 110, 120, 220, 230, 240, 400 VAC	50 Hz	UL
C - anti-vibration boot & clamp	2 - 55 × 55 mm	3 - IP65	2 - flat pin 6,3 × 0,8	S - group	6-30, 10-80, 110, 220 VDC	60 Hz	
D - DIN rail	3 - 72 × 72 mm		3 - screw terminal				
F - snap fastener	5 - 52 × 52 mm						
G - retainer	6 - Ø 80 mm						

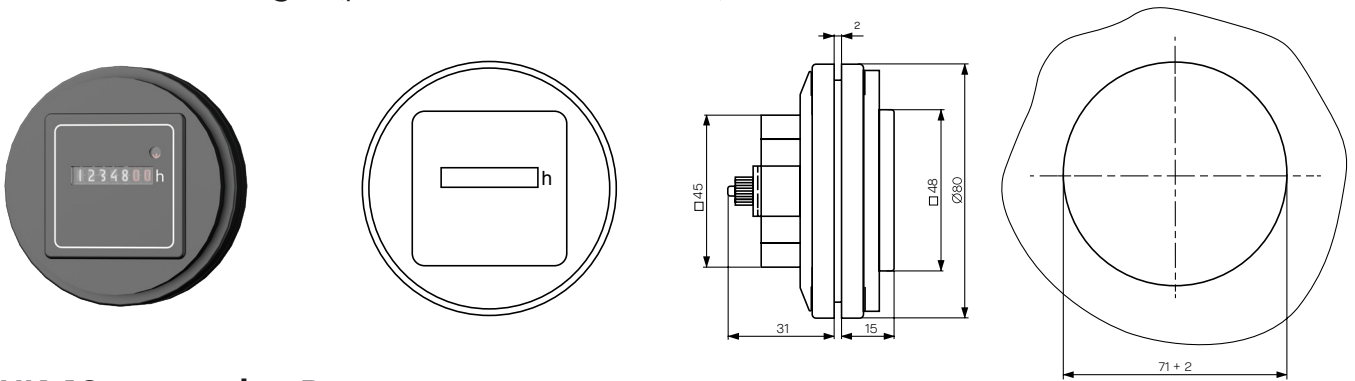
HK 46 panel cut-outs



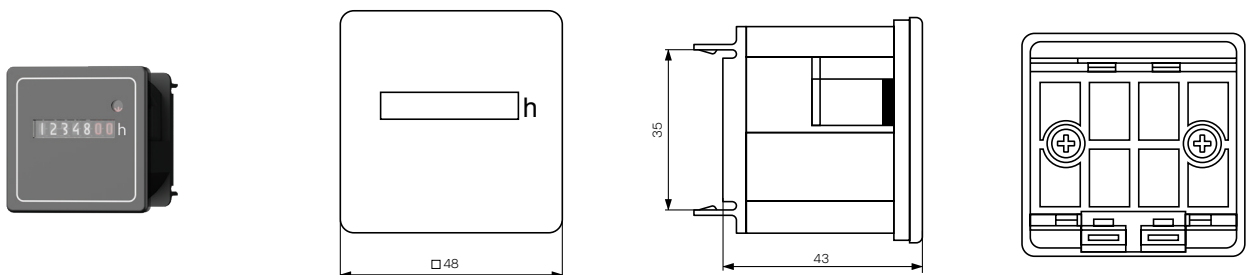
HK 46 - mounting A (panel cut-out 1 and 3)



HK 46 - mounting C (panel cut-out Ø 71 + 2mm)

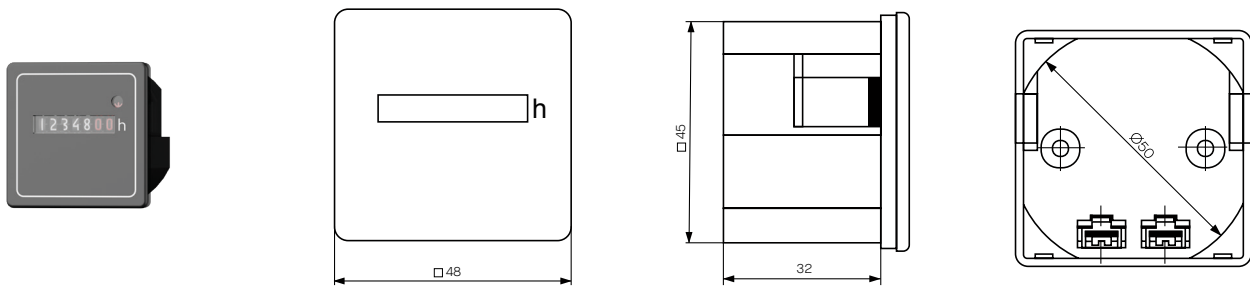


HK 46 - mounting D

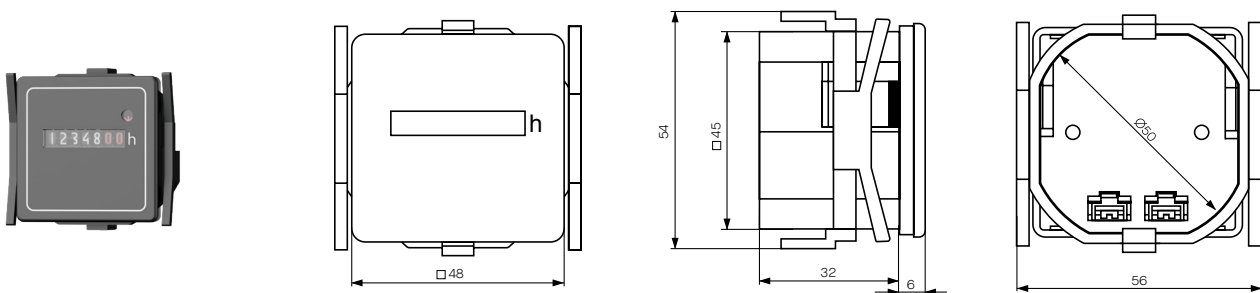




**HK 46 - mounting F (panel cut-out  $\varnothing$  71 + 2mm)**



**HK 46 - mounting G (panel cut-out  $\varnothing$  71 + 2mm)**



# HK 47

## Hour meter



### Highlights

- ▶ Price competitive meter
- ▶ Excellent quality
- ▶ Long lifetime
- ▶ All necessary approvals
- ▶ Your branding available

### Applications

- ▶ Garden equipment
- ▶ Farm equipment
- ▶ Utility vehicles
- ▶ Marine

Mechanical data	
Front dimension	Ø 58 mm
Display	AC: 5 integers, 2 decimals DC: 6 integers, 1 decimal AC indicator, without reset
Digit height	4 mm
Digit color	integer: white on black decimal: 50 Hz - red on black 60 Hz - black on white
Counting range	AC: 99999,99 h, DC: 999999,9 h
Reading accuracy	AC: 1/100 h (36 sec) DC: 1/10 h (6 min)
Weigth	ca. 52 g
Housing color	standard black
Bezels for 36 × 24 mm	Ø 72 mm (for mtg. H) Ø 80 mm (for mtg. C)
Mounting options	A - aluminum clamp C - anti-vibration boot & clamp Ø 80 mm D - DIN rail H - 3-screw front Ø 72 mm

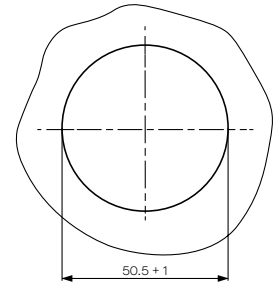
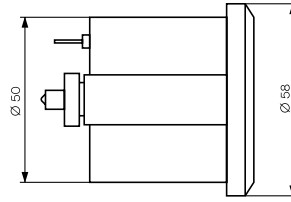
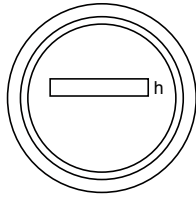
Electrical data	
Operating voltage	24, 48, 60, 110, 120, 220, 230, 240, 400 VAC ± 10%, 50 or 60 Hz 6-30, 10-80, 110, 220 VDC ± 10%
Current consumption	AC: max. 8 mA DC: max. 9 mA
Accuracy	AC: ± 0,02 % DC: ± 0,002 %
Connection	flat pin 6,3 × 0,8 with screw flat pin 6,3 × 0,8

Ambient conditions	
Operating temperature	AC: -25 °C .. +80 °C DC: -20 °C .. +70 °C
Storage temperature	AC: -40 °C .. +80 °C DC: -20 °C .. +70 °C
Relative humidity	max. 80% at +25 °C
Protection	IP65 front IPO0 terminals
Approvals	CE Mark UL E171200*  RoHS compliant

\* For UL certified version please specify when ordering

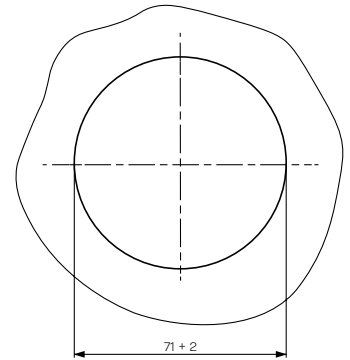
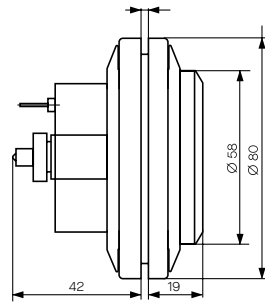
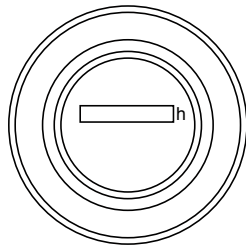
Ordering							
HK 47 . X X / X X X / X X X							
<b>Mounting</b>	<b>Front dimension</b>	<b>Front protection</b>	<b>Connection</b>	<b>Package</b>	<b>Voltage (specify)</b>	<b>Frequency</b>	<b>Optional</b>
A - aluminum clamp	4 - Ø 58 mm	3 - IP65	1 - flat pin 6,3 × 0,8 with screw	P - single	24, 48, 60, 110, 120, 220, 230, 240, 400 VAC	50 Hz 60 Hz	UL
C - anti-vibration boot & clamp Ø 80 mm	5 - Ø 72 mm	4 - IP67	2 - flat pin 6,3 × 0,8	S - group	6-30, 10-80, 110, 220 VDC		
H - 3-screw front mount Ø 72 mm	6 - Ø 80 mm						

**HK 47 - mounting A**



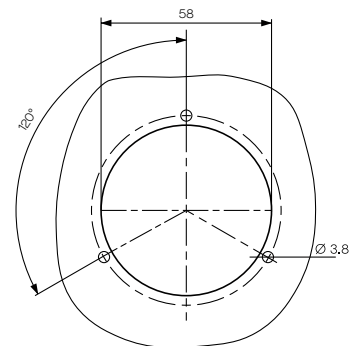
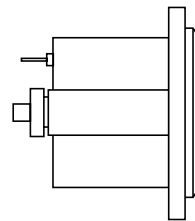
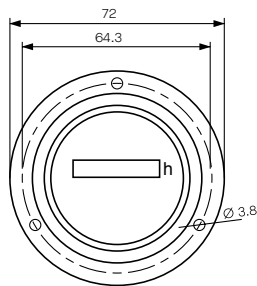
Panel cut-out

**HK 47 - mounting C**



Panel cut-out

**HK 47 - mounting H**



Panel cut-out

# HK 48, HK 49

## Hour meter



### Highlights

- ▶ Price competitive meter
- ▶ Excellent quality
- ▶ Long lifetime
- ▶ All necessary approvals
- ▶ Your branding available

### Applications

- ▶ Control panels

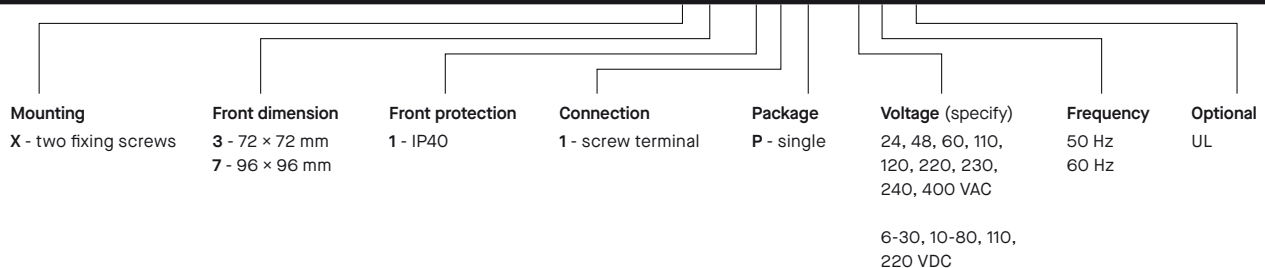
Mechanical data	
Front dimension	HK 48: 72 x 72 mm HK 49: 96 x 96 mm
Display	AC: 5 integers, 2 decimals DC: 6 integers, 1 decimal AC indicator, without reset
Digit height	4 mm
Digit color	integer: white on black decimal: 50 Hz - red on black 60 Hz - black on white
Counting range	AC: 99999,99 h, DC: 999999,9 h
Reading accuracy	AC: 1/100 h (36 sec) DC: 1/10 h (6 min)
Weight	HK 48: 125 g HK 49: 172 g
Housing color	black
Bezels	-
Mounting options	X - two fixing screws

Electrical data	
Operating voltage	24, 48, 60, 110, 120, 220, 230, 240, 400 VAC ± 10%, 50 or 60 Hz 6-30, 10-80, 110, 220 VDC ± 10%
Current consumption	AC: max. 8 mA DC: max. 9 mA
Accuracy	AC: ± 0,02 % DC: ± 0,002 %
Connection	screw terminals

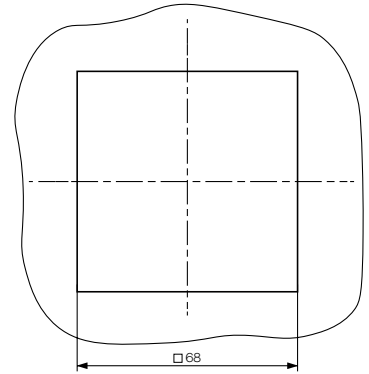
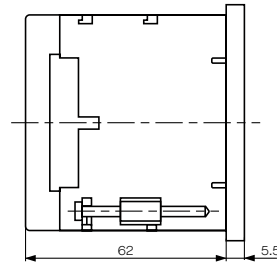
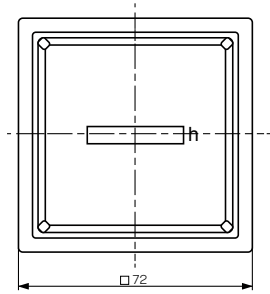
Ambient conditions	
Operating temperature	AC: -25 °C .. +80 °C DC: -20 °C .. +70 °C
Storage temperature	AC: -40 °C .. +80 °C DC: -20 °C .. +70 °C
Relative humidity	max. 80% at +25 °C
Protection	IP40 front IP00 terminals IP20 terminals with black cover
Approvals	CE Mark UL E171200*
	RoHS compliant

\* For UL certified version please specify when ordering

**Ordering** HK 48, HK 49 . X X / X X X / X X X

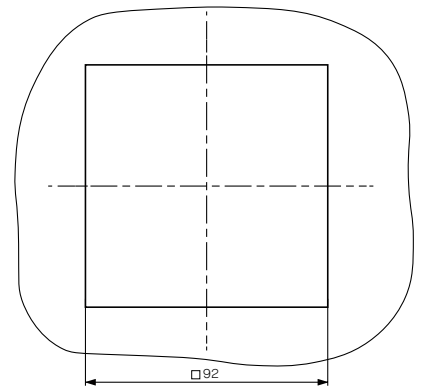
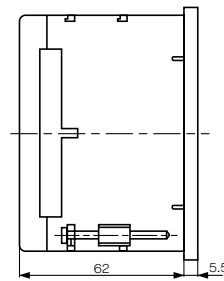
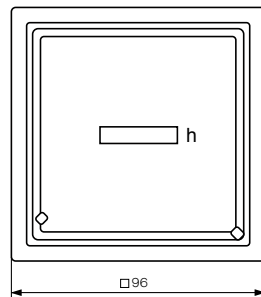


HK48



Panel cut-out

HK49



Panel cut-out