

# ALARMTEC

Sealed, maintenance free, lead-acid batteries with a designed lifetime **5 years**.

**ALARMTEC** – an ideal product for use in alarm and fire-fighting systems.

More than **1 million** ALARMTEC batteries purchased by clients!

## ALARMTEC – ECONOMICAL SOLUTIONS



### Application

- alarm and fire-fighting systems
- emergency lighting
- fiscal cash registers and printers
- telephone exchanges
- emergency power supply for automatics and protection systems

### Characteristics

- sealed and maintenance free
- low internal resistance
- operation in any position possible

- wide range of operating temperatures: from  $-20^{\circ}\text{C}$  ÷  $60^{\circ}\text{C}$ .
- recommended operating temperature: from  $15^{\circ}\text{C}$  ÷  $25^{\circ}\text{C}$
- designed lifetime 5 years
- range of battery capacities from 1,2 to 65 Ah
- compact design 12 V – monoblok

### Why ALARMTEC batteries?

- real lifetime up to 50% longer than that of cheap Asiatic products
- attractive price
- failure- free operation
- manufacturer's ISO 9001 / 14001
- technical support by experienced professionals

## AGM BATTERIES

AGM **Absorbed Glass Mat** technology batteries have **electrolyte** absorbed in highly porous **fiber glass separators** placed between the plates. AGM batteries have a low internal resistance, which means a higher terminal voltage and longer operation time, especially when discharged with a high current.

Item	Type	Un	C <sub>20</sub>	H height	L length	W width	Unit weight
		[V]	[Ah]	[mm]	[mm]	[mm]	[kg]
1	BP 1.2-12	12	1,2	52+6	97	43	0,57
2	BP 5-12		5,0	101+6	90	70	1,80
3	BP 7-12		7,0	94+5	151	65	2,05
4	BP 12-12		12,0	95+6	151	98	3,20
5	BP 18-12		18,0	168	182	77	5,32
6	BP 26-12		26,0	125	166	175	8,00
7	BP 40-12		40,0	170	197	165	13,2
8	BP 65-12		65,0	178	348	167	19,2

## CHARGING

- ALARMTEC batteries should be charged with constant voltage with limitation of the initial charging current (IU characteristics)
- initial charging current should not be larger than  $0,3 C^*$  [A]
- the recommended initial charging current :  $0,1 C$  [A]
- charging voltage:
  - » **standby use** – emergency supplies: from 2,25 to 2,30 V/ cell, recommended charging voltage equals 2,275 V/cell.  
*EXAMPLE:* for a 12 V battery consisting of 6 cells the charging voltage is 13,5 to 13,8 V.
  - » **cycle use** – the battery remains the sole source of energy: 2,40 to 2,50 V/cell, the recommended charging voltage equals 2,45 V/cell  
*EXAMPLE:* : for a 12 V battery consisting of 6 cells, the charging voltage equals 14,4 to 15,0 V.

The charging voltage should be stable and it's ripple should not exceed 1,5%.

\*C - the battery capacity

## DISCHARGE DEPTH

For short back-up times of **up to 30 min**, the minimal final discharge voltage is **8 V**.

For back-up times **longer than 30 min**, the minimal final discharge voltage is **10,5 V**.

## SAFETY

Maintenance free batteries have one-way pressure relief valves that prevent excess pressure from building up inside the cell ( for example when overcharged) and the battery from exploding.

Adequate air circulation (natural or forced ventilation) must be ensured in rooms where a batteries will be used.

The real lifetime of **ALARMTEC** batteries has been proven in hundreds of thousands alarm installations.