

**OPzS-Blockbatteries
for stationary installations**

HAGEN *compact PT*



HAGEN compact PT



HAGEN compact PT 12 V 3 OPzS 150



Connectors, screws, lids, etc.



Labyrinth plug



Ceramic funnel plugs

The HAGEN *compact PT/OPzS* series has especially been developed for stationary applications.

These batteries are 12 V block batteries in the capacity range of 37.5 – 150 Ah and 6 V block batteries of 200 – 300 Ah (according to DIN 40737, section 3).

Battery design

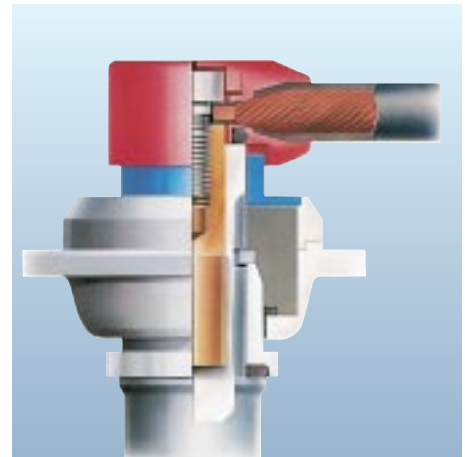
The cells are equipped with positive iron clad (tubular) plates and negative grid plates as well as specially selected separation system. They are installed in highly transparent plastic block cases.

The terminals of the block batteries are designed as screwtype terminals. The HAGEN *patentpol* whose advantages speak for themselves has also been used as terminal for this series:

- Terminals, connectors and cell lids remain clean and dry. Thus the maintenance required for battery cleaning can now be reduced.
- The insulation value of the service-system is preserved without restriction throughout the entire life provided the installation and maintenance instructions are observed.

User advantages

HAGEN *compact PT OPzS* block batteries can be used in many applications because of their favourable capacity gradation. Compact shape and the straight-line product design particularly facilitate space-saving installation. Transparent block cases allows visual check of the electrolyte level; openings in the connector lids resp. tabs in the containerlid simplify checking of cell voltages. An electrolyte-proof terminal bushing is guaranteed using HAGEN *patentpol*. The screw-type terminals and flexible cable connectors facilitate simple and fast installation of the batteries.



HAGEN *patentpol* screw-type design (depicted)

- Electrically perfect connections.
 - Safe handling during transport and installation. The connection between terminal and lid is mechanically stable.
 - Make use of the new safety factor for your battery installation!
- Our proven fully insulated, flexible cable connectors serve for connecting the cells and as terminal.

Block batteries in standard design are provided with labyrinth plugs. As accessories flame-retardent ceramic funnel plugs (type K13/110) according to DIN 40740 are available.

Battery installation

The block batteries can be installed according to VDE 0510, part 2. in cabinet or on wood/steel racks depending on particular customer requirements or on local conditions. Ventilation requirements can be reduced according to VDE 0510, part 2.7.1. because the antimony content of the positive plates of this series is below 3 %.

Our steel racks are essentially composed of plug-in elements which ensures their easy construction and shortens installation time. The mode of installation should guarantee good visual checking. All elements are protected by an electrolyte-proof plastic coating.

The terminals of the batteries are provided with protective caps for transport.

Technical data

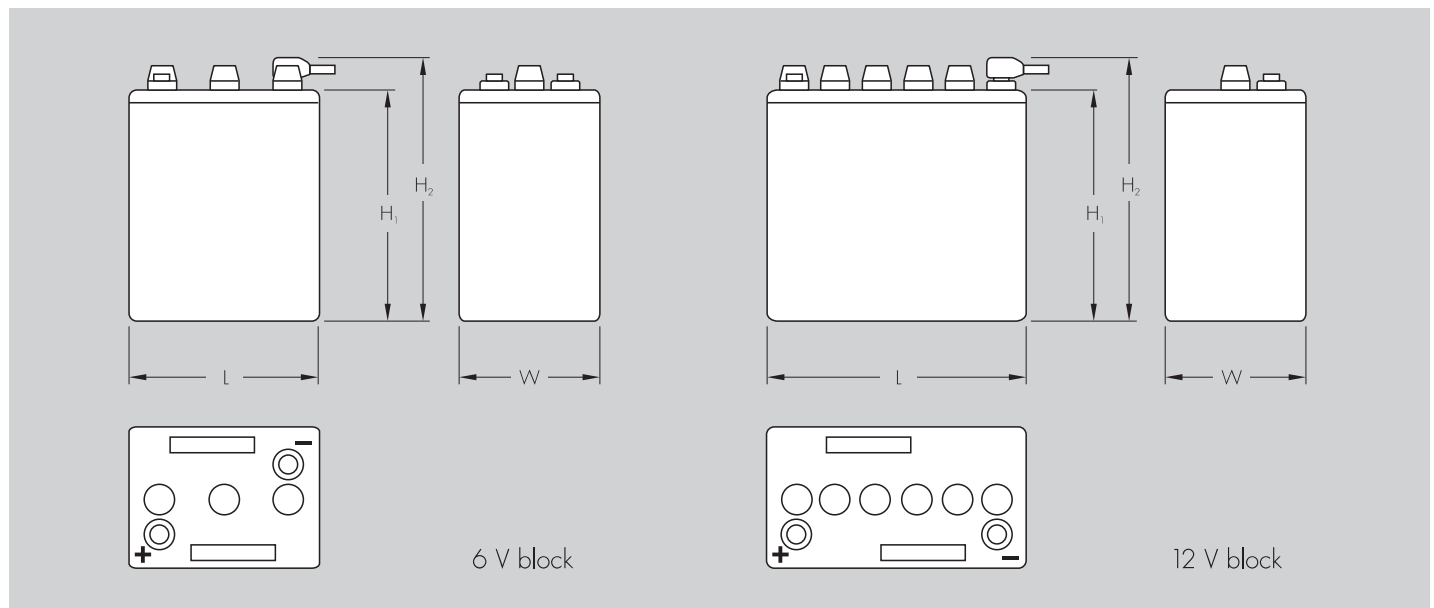
Electrical characteristics according to DIN 40 737, section 3

Type	Capacity (Ah)				Discharge current (A)				Final discharge voltage (V/cell)			
	C10	C5	C3	C1	10h	5h	3h	1h	10h	5h	3h	1h
12V 1 OPzS 37,5	37.5	31.9	28.8	20.0	3.75	6.38	9.60	20.00	1.80	1.77	1.75	1.67
12V 1 OPzS 50	50.0	42.5	38.4	26.6	5.00	8.50	12.80	26.60				
12V 2 OPzS 75	75.0	63.8	57.6	40.0	7.50	12.76	19.20	40.00				
12V 2 OPzS 100	100.0	85.0	76.8	53.2	10.00	17.00	25.60	53.20				
12V 3 OPzS 150	150.0	127.5	115.2	79.8	15.00	25.50	38.40	79.80				
6V 4 OPzS 200	200.0	170.0	153.6	106.4	20.00	34.00	51.20	106.40				
6V 5 OPzS 250	250.0	212.5	192.0	133.0	25.00	42.50	64.00	133.00				
6V 6 OPzS 300	300.0	255.0	230.4	159.6	30.00	51.00	76.80	159.60				

Technical data

Dimensions and weights

Typ	External battery dimensions (mm)				Weights	
	L	W	H ₁	H ₂ ¹⁾	Battery weight with acid (kg)	Acid weight (kg) d=1.24 kg/l
12V 1 OPzS 37,5	272	205	335	385	37	12
12V 1 OPzS 50	272	205	335	385	39	12
12V 2 OPzS 75	272	205	335	385	47	11
12V 2 OPzS 100	272	205	335	385	50	10
12V 3 OPzS 150	380	205	335	385	70	14
6V 4 OPzS 200	272	205	335	385	47	9
6V 5 OPzS 250	380	205	335	385	61	15
6V 6 OPzS 300	380	205	335	385	68	14



¹⁾ By use of ceramic funnel plugs, height H₂ will be 10 mm more.