



GERMANY TECHNOLOGY

6 OPzS 420

(2V-455AH @ C10)

HIGH PERFORMANCE



Specifications:

Very high operational reliability under rough operating conditions.

Low maintenance due to reduced antimony in the alloy and high electrolyte reserve.

20 years at 20°C (80% remaining capacity from C10).

Also designed for cyclic applications.

Also available in dry charged condition with separate electrolyte.

Low gassing due to PbSb1.6SnSe alloy (EN 50272-2).

Conforms to DIN 40 736 and DIN 40 737 T3.

Electrolyte: diluted sulphuric acid dN = 1.25 kg/l.

Optimized plate design produces increased capacities compared to DIN.

Completely recyclable.

Applications

Telecommunications

Emergency lighting

Microwave radio systems

Power generation plants

Photovoltaics

Innovative Features

- ◆ Tubular positive plates: Robust tubular plates consisting of a lead antimony alloy, optimized for high corrosion resistances.
- ◆ Pasted negative plates: Grid plate construction consisting of low antimony with long-life expander material.
- ◆ Separators: Microporous and robust, for electrical separation of the positive and negative plates and optimized for low internal resistance.
- ◆ Container: High impact, transparent SAN (Styrol-Acryl-Nitril).
- ◆ Safety Vents: Cells incorporate flame retardant ceramic plugs that filter out any drops of electrolyte from the escaping gases preventing any errant spark or flame from entering the battery.
- ◆ Poles: Screw connection for easy and safe assembly and maintenance-free connection with excellent conductivity.
- ◆ Post seals: Extremely high integrity post seal design to prevent electrolyte leakage and terminal corrosion.
- ◆ Connectors: Flexible, fully insulated cable connectors screwed to the terminal with an insulated screw having a probe hole on the top for electrical measurement.

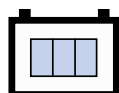
**PROVEN HIGH RELIABILITY ENERGY
STORAGE FOR CRITICAL APPLICATION**

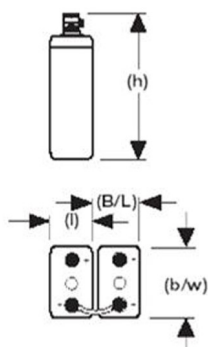
Standard and Compliance

DIN 40736 part 1

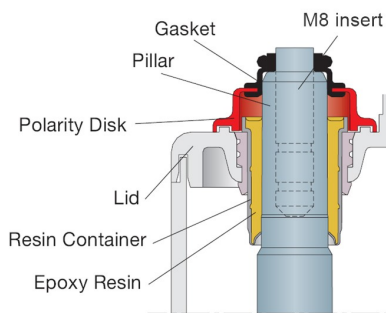
DIN 40737 part 2

IEC 896 part 1

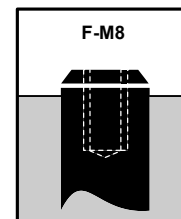




Dimension figure



High Reliability Post Seal



16 Nm

Container: SAN (acrylonitrile polystyrene),
UL 94 V-0 standard

Tubular OPzS Range Electrical Specifications & Dimensions

Part number	DIN Type	Nom. Voltage (V)	C8 AH to 1.75VPC	C10 AH to 1.80VPC	C100 AH to 1.80VPC	Outline Dimensions (mm)				Weight With acid (kg)	Acid Weight (kg)	Pole Pairs	Internal Resist. acc. to IEC 896-2 mOhms	Short Circuit Current	Terminal
						Length (l)	Width (b/w)	Height (h)	Installed Length (B/L)						
2TS060420	6 OPzS 420	2	451	455	631	147	208	520	157	33.5	8.00	1	0.48	3650	F-M8

Acid density $d_N = 1.250 \text{ kg/l}$

Tubular OPzS Range Discharge Data Amperes at 20°C

End Point Volts/Cell	Discharge Time in Minutes					Discharge Time in hours									
	5 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour	
1.90	205	203	197	191	177	149	128	112	90.8	75.7	65.7	47.5	39.6	21.9	
1.87	225	222	215	208	192	161	137	120	95.9	79.9	69.3	49.9	41.7	22.9	
1.85	244	240	232	224	207	172	146	127	101	84.0	72.8	52.3	43.7	23.9	
1.83	272	265	255	245	225	183	154	133	105	86.8	74.8	53.2	44.4	24.3	
1.80	314	303	289	277	252	200	166	142	111	90.9	77.8	54.6	45.5	25.0	
1.75	383	364	341	323	288	221	180	152	116	95.0	81.4	56.4	46.9	25.7	
1.70	453	423	390	364	319	235	189	158	120	97.7	83.3	57.8	47.8	26.4	
1.65	522	480	437	402	346	246	196	162	123	99.1	83.7	57.9	47.9	26.5	

Tubular OPzS Range Discharge Data Watts at 20°C

End Point Volts/Cell	Discharge Time in Minutes					Discharge Time in hours									
	5 min	10 min	15 min	20 min	30 min	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	8 hour	10 hour	20 hour	
1.90	334	334	323	317	296	258	228	202	170	142	125	91.6	76.5	43.6	
1.87	404	402	389	378	352	298	257	226	184	154	135	98.0	81.9	45.8	
1.85	451	447	433	418	389	324	277	242	193	162	141	102	85.6	47.3	
1.83	497	488	470	453	418	343	290	252	201	167	145	104	86.7	48.1	
1.80	566	550	526	505	461	371	311	268	211	174	150	106	88.5	49.3	
1.75	674	644	607	577	517	404	333	285	220	180	156	109	90.9	50.4	
1.70	774	730	677	635	562	425	346	294	225	184	159	111	92.4	51.7	
1.65	869	807	740	685	598	438	356	299	230	186	159	111	92.4	51.7	

Long Duration Discharge Capacity (Ah) at 20°C

Part No.	DIN Type	End Point Volts/Cell	C ₂₄	C ₄₈	C ₇₂	C ₉₆	C ₁₀₀	C ₁₂₀	C ₂₄₀
2TS060420	6 OPzS 420	1.85	541	579	618	623	625	628	639
		1.80	546	585	624	629	631	634	645

Actual battery performance data may be +/-5% of figures shown above.

