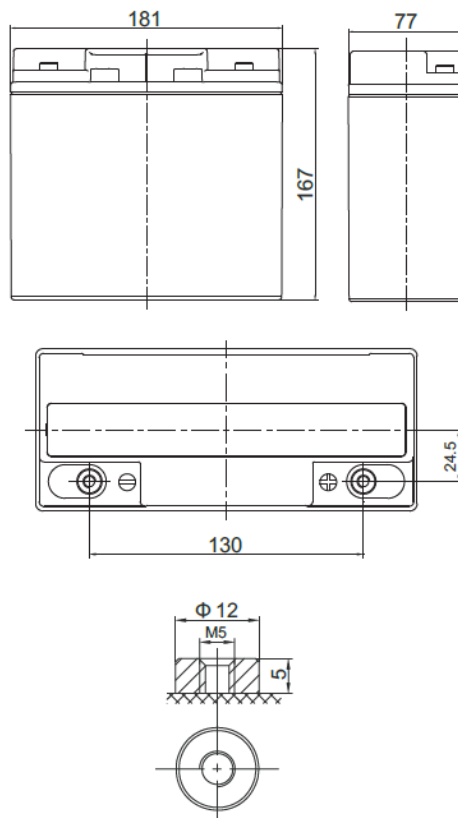


Nominal voltage	12 V	
Nominal capacity	20 Ah @ C20 to 1,75 V/cell	
Dimensions	Length	181 mm
	Width	77 mm
	Height / Total height	167 / 167 mm
Weight	~ 5,9 kg	
Technology	VRLA (Valve Regulated Lead Acid) AGM (Absorbent Glass Mat)	
Design life time	10-12 years (standby use)	
Internal resistance	~ 16,0 mΩ (full charged)	
Operating temperature range	Discharge	-20°C ~ +60°C
	Charge	0°C ~ +50°C
	Storage	-20°C ~ +60°C
Maximum discharge current	200 A (5 sec.)	
Short circuit current	820 A	
Recommended maximum charging current	5,9 A	
Charging voltage	Standby use	13,7 ~ 13,9 VDC
	Cycle use	14,6 ~ 14,8 VDC
Self discharge	Monthly is less than 3% at 25°C	
Container material	ABS UL94HB (optional UL94-V0)	
Terminal types	Internal thread M5 (breaking torque 6-7Nm)	



## CONSTANT CURRENT DISCHARGE CHARACTERISTICS (A at 25°C)

Voltage / Time	5 min	10 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
9.6 V	79,30	51,72	38,15	22,08	12,76	7,53	5,47	4,36	3,68	2,46	2,00	1,04
10.0 V	76,43	50,17	37,15	21,59	12,52	7,42	5,40	4,30	3,64	2,43	1,98	1,03
10.2 V	72,70	48,15	35,84	20,95	12,21	7,27	5,30	4,23	3,58	2,40	1,96	1,02
10.5 V	67,92	45,54	34,13	20,11	11,80	7,08	5,17	4,14	3,50	2,36	1,92	1,01
10.8 V	61,88	42,19	31,93	19,03	11,26	6,82	5,00	4,01	3,40	2,30	1,88	0,99
11.1 V	54,45	38,01	29,15	17,64	10,57	6,49	4,78	3,84	3,27	2,22	1,82	0,96

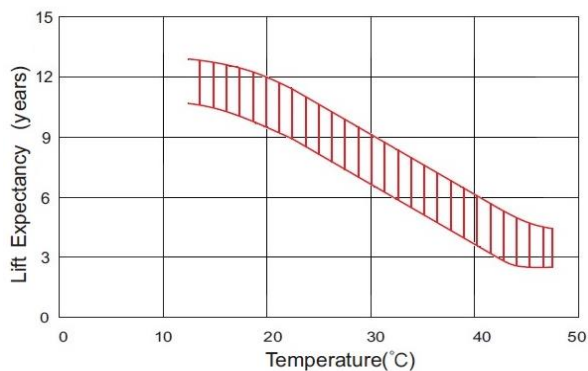
## CONSTANT POWER DISCHARGE CHARACTERISTICS (W at 25°C)

Voltage / Time	5 min	10 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
9.6 V	818,9	535,3	406,2	244,2	145,3	86,9	63,6	50,9	43,2	29,2	24,0	12,5
10.0 V	810,3	533,2	403,9	242,4	144,1	86,2	63,2	50,6	42,9	29,0	23,8	12,4
10.2 V	779,4	517,4	393,0	236,6	141,0	84,8	62,2	49,8	42,3	28,7	23,5	12,3
10.5 V	741,2	498,1	379,7	229,4	136,9	82,9	61,0	48,9	41,6	28,2	23,1	12,1
10.8 V	687,1	469,6	360,2	219,2	131,3	80,3	59,2	47,6	40,5	27,6	22,6	11,9
11.1 V	615,4	430,6	333,5	205,2	124,1	76,8	56,8	45,8	39,1	26,7	21,9	11,6

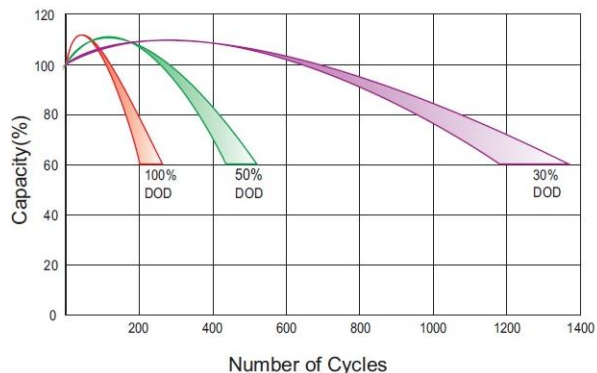
## According with:

PN-EN 60896-21:2007	ISO 9001
PN-EN 60896-22:2007	ISO 14001
PN-EN 61056-1:2013	
PN-EN 61056-2:2013	
PN-E-83016:1999	

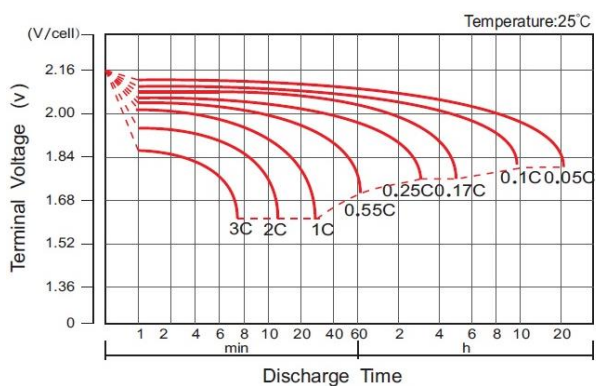
## EFFECT OF TEMPERATURE ON LONG TERM LIFE



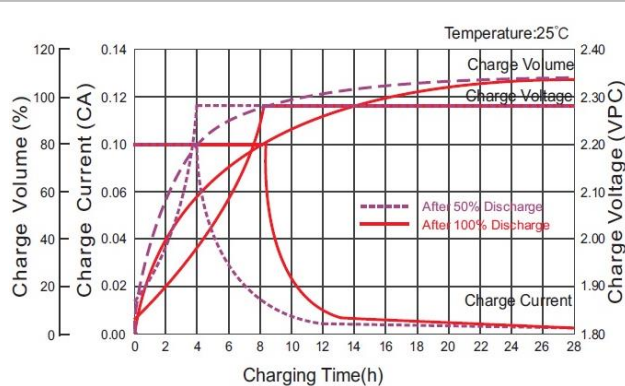
## CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE



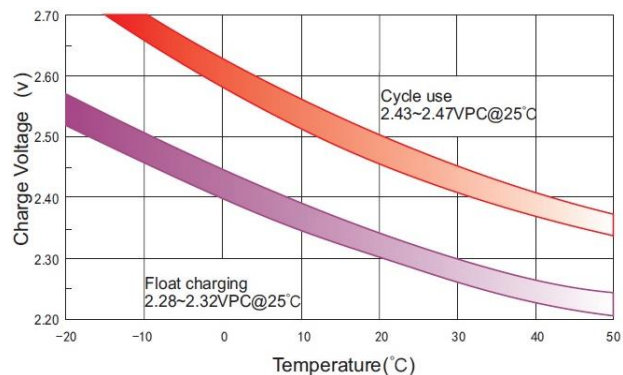
## DISCHARGE CHARACTERISTICS



## CHARGE CHARACTERISTIC FOR STANDBY USE



## RELATIONSHIP BETWEEN CHARGING VOLTAGE AND TEMPERATURE



## STORAGE CHARACTERISTICS

