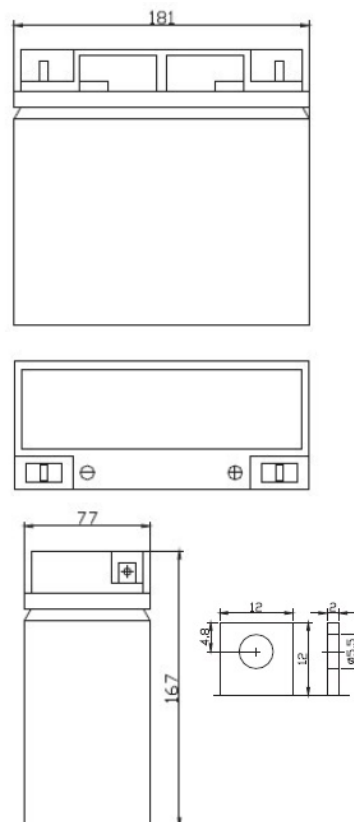


Nominal voltage	12 V	
Nominal capacity	18 Ah @ C20 to 1,75 V/cell	
Dimensions	Length	181 mm
	Width	77 mm
	Height / Total height	167 / 167 mm
Weight	~ 5,2 kg	
Technology	VRLA (Valve Regulated Lead Acid) AGM (Absorbent Glass Mat)	
Design life time	10-12 years (standby use)	
Internal resistance	~ 16,0 mΩ (full charged)	
Operating temperature range	Discharge	-20°C ~ +60°C
	Charge	0°C ~ +50°C
	Storage	-20°C ~ +60°C
Maximum discharge current	180 A (5 sec.)	
Short circuit current	750 A	
Recommended maximum charging current	5,4 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	Bolt-nut 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	71,37	46,54	34,34	19,87	11,48	6,77	4,92	3,92	3,31	2,21	1,80	0,94
10.0 V	68,79	45,16	33,44	19,43	11,27	6,68	4,86	3,87	3,27	2,19	1,78	0,93
10.2 V	65,43	43,34	32,25	18,86	10,99	6,54	4,77	3,81	3,22	2,16	1,76	0,92
10.5 V	61,12	40,98	30,71	18,10	10,62	6,37	4,66	3,72	3,15	2,12	1,73	0,91
10.8 V	55,69	37,97	28,73	17,12	10,13	6,14	4,50	3,61	3,06	2,07	1,69	0,89
11.1 V	49,01	34,21	26,23	15,87	9,51	5,84	4,31	3,46	2,95	2,00	1,64	0,87

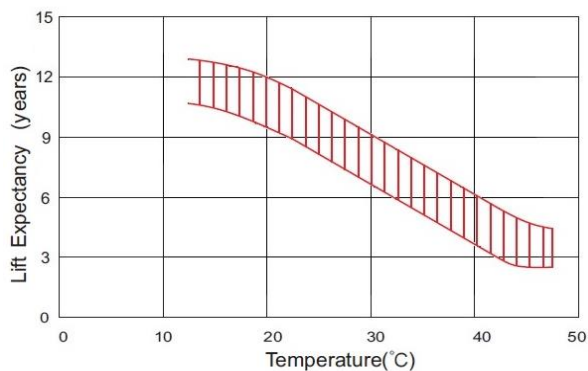
## CONSTANT POWER DISCHARGE CHARACTERISTICS (W at 25°C)

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	737,0	481,8	365,6	219,8	130,7	78,2	57,3	45,8	38,9	26,3	21,6	11,2
10.0 V	729,2	479,8	363,5	218,2	129,7	77,6	56,9	45,5	38,6	26,1	21,4	11,2
10.2 V	701,4	465,7	353,7	212,9	126,9	76,3	56,0	44,9	38,1	25,8	21,1	11,1
10.5 V	667,1	448,3	341,7	206,5	123,2	74,6	54,9	44,0	37,4	25,4	20,8	10,9
10.8 V	618,4	422,6	324,2	197,3	118,2	72,3	53,3	42,8	36,5	24,8	20,3	10,7
11.1 V	553,8	387,5	300,2	184,7	111,7	69,2	51,2	41,2	35,2	24,0	19,7	10,4

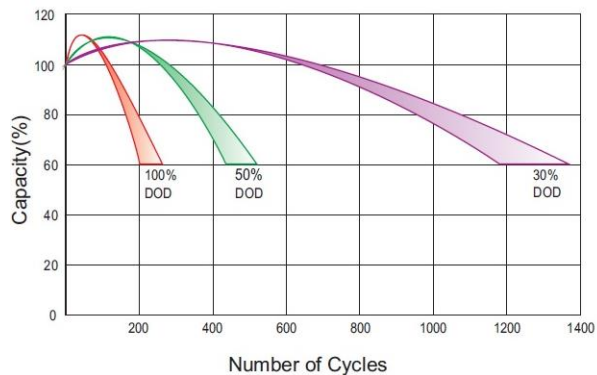
## According with:

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	

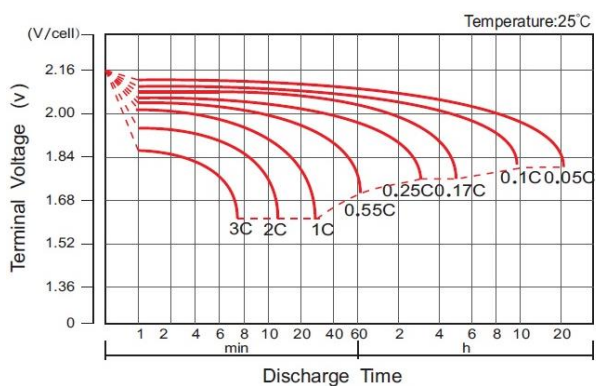
## EFFECT OF TEMPERATURE ON LONG TERM LIFE



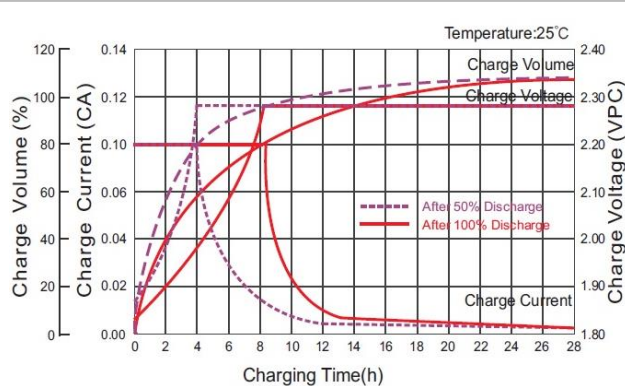
## CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE



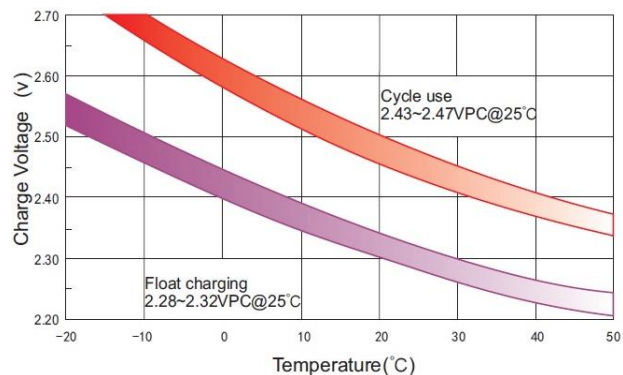
## DISCHARGE CHARACTERISTICS



## CHARGE CHARACTERISTIC FOR STANDBY USE



## RELATIONSHIP BETWEEN CHARGING VOLTAGE AND TEMPERATURE



## STORAGE CHARACTERISTICS

