



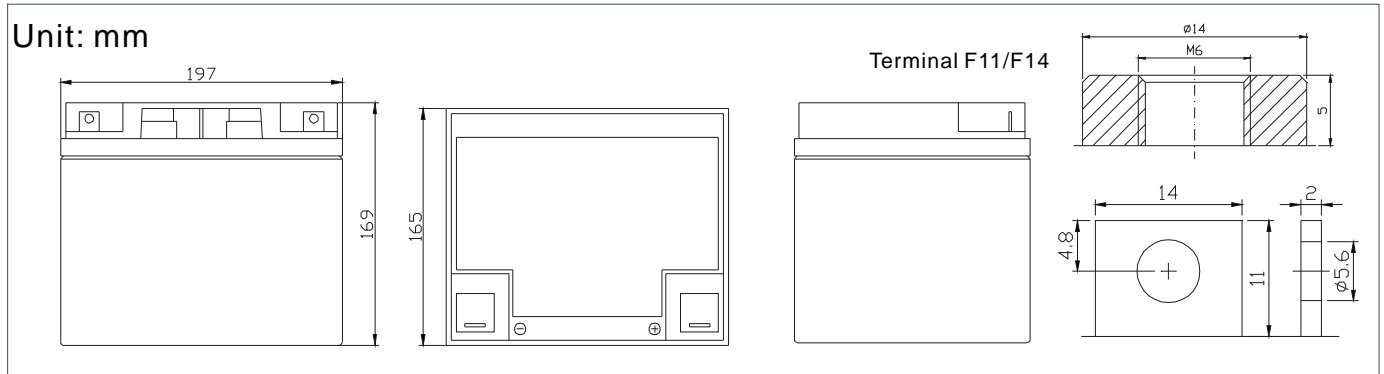
PR12400 is a general purpose battery with 5 years life in standby service, or more than 260 cycles at 100% D.O.D by cyclic use. As with all PROSTAR batteries, all PR models are rechargeable, highly efficient, leak proof and maintenance free.

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	40.0Ah@20hr-rate to 1.75V per cell @25?
Weight	Approx.13.5Kg
Max. Discharge Current	200A(5 sec)
Internal Resistance A	Approx. 8m?
Operating Temperature Range	Discharge: -20? ~60? Charge: 0? ~50? Storage: -20? ~60?
Normal Operating Temperature Range	25? ±5?
Float charging Voltage	13.6 to 13.8VDC/unit Average at 25?
Recommended Maximum Charging Current Limit	12A
Equalization and Cycle Service	14.4 to 15.0VDC/unit Average at 25?
Self Discharge	PROSTAR batteries can be stored for more than 6 months at 25? . Please charge batteries before using. For higher temperature, the time interval will be shorter.
Terminal	Terminal F11/F14
Container Material	A.B.S. (UL94-HB) Flammability resistance of UL94-V2 can be available upon request



Dimensions



Constant Current Discharge Characteristics Unit: A(25?)

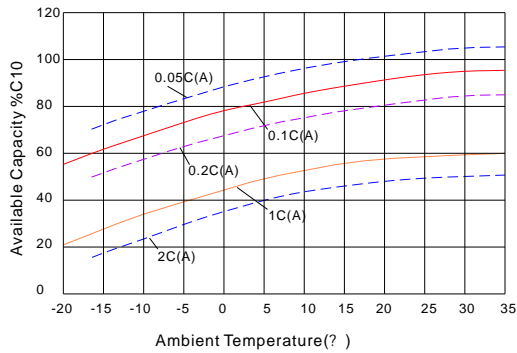
F.V/Time	5M N	10M N	15M N	30M N	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	150	107	78	46	26 0	16 0	10 4	8 6	6 8	4 9	4 2	2 2
10.0V	146	102	76	45	25 9	15 8	10 4	8 6	6 8	4 9	4 1	2 2
10.2V	137	98	75	45	25 6	15 7	10 3	8 6	6 7	4 8	4 1	2 1
10.5V	123	91	72	44	25 4	15 6	10 3	8 5	6 6	4 8	4 0	2 1
10.8V	111	83	66	42	24 8	15 3	10 0	8 3	6 5	4 7	4 0	2 0
11.1V	97	74	59	39	23 6	14 6	9 6	7 9	6 2	4 5	3 9	1 9

Constant Power Discharge Characteristics Unit: W(25?)

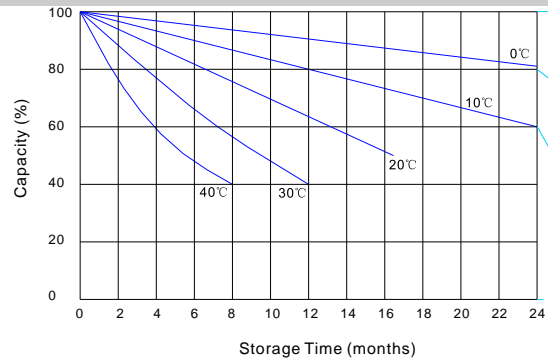
F.V/Time	5M N	10M N	15M N	30M N	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	268	196	144	87	49 6	30 6	20 1	16 6	13 1	9 5	7 8	4 1
10.0V	263	187	141	85	49 3	30 5	20 0	16 6	13 0	9 5	7 7	4 1
10.2V	248	181	139	84	49 0	30 2	19 9	16 5	13 0	9 4	7 7	4 0
10.5V	223	167	133	83	48 5	29 9	19 8	16 4	12 9	9 3	7 6	4 0
10.8V	201	152	122	79	47 3	29 5	19 3	16 0	12 7	9 1	7 5	4 0
11.1V	173	135	109	74	44 8	28 1	18 4	15 2	12 0	8 8	7 3	3 8

All mentioned values are average values

Temperature effects curve



Storage characteristic



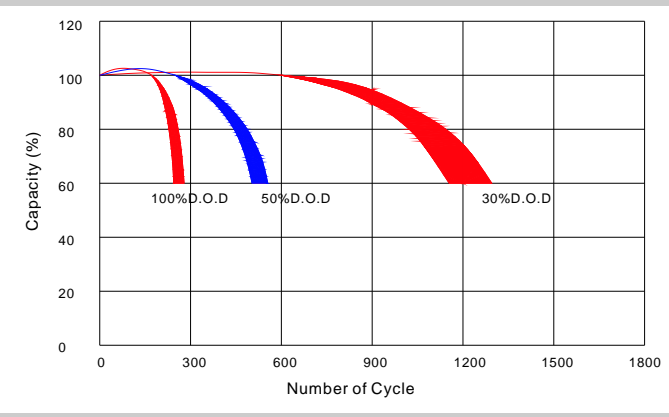
Supplementary charge required (Carry out supplementary y charge before use if 100% capacity is requires)

Supplementary charge required before use. This supplementary y charge will help to recover the capacity and should be made as early as possible.

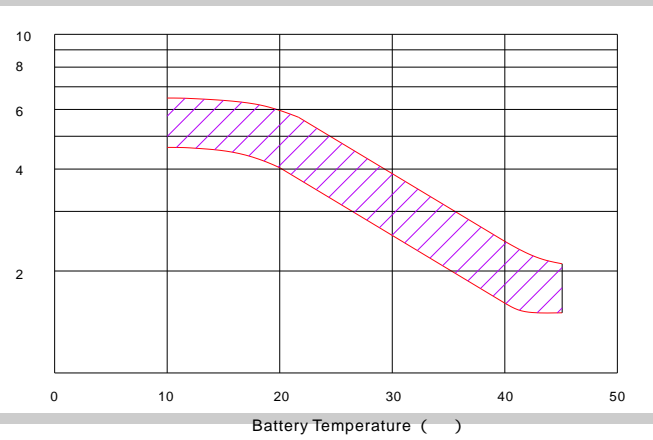
Supplementary charge may often fail to recover the capacity. The batter y should never be left standing till this state is reached

Supplementary y charge and storage guidelines

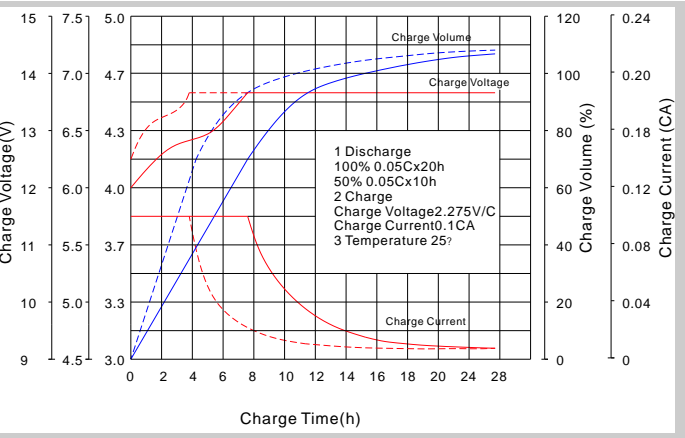
Life characteristics of cyclic use



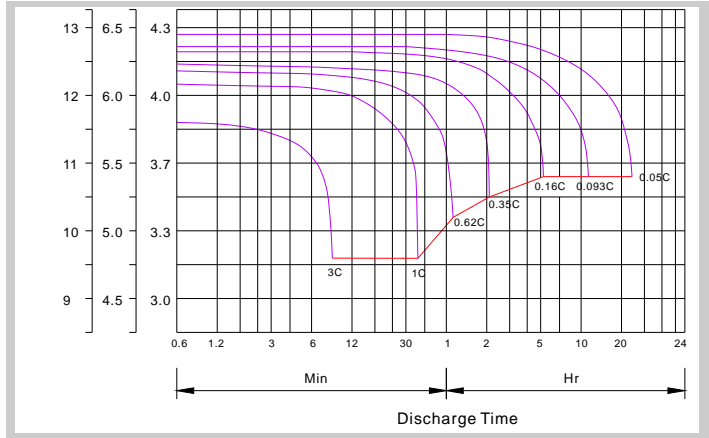
Effect of temperature on long term float life



Charge characteristic Curve for standby use



Discharge characteristic curve



Charging Procedures

Application	Charge Voltage (V)			Max.Charge Current
	Temperature	Set point	Allowable range	
Cycle Use	25°	14.7	14.4~15.0	0.3C
Standby	25°	13.7	13.6~13.8	0.3C

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A)<0.20C	0.20C<(A)<1.0C	(A)>1.0C

Charge the batteries at least once every six months, if they are stored at 25° .

Charging Method:

Constant Voltage	-0.2C+14.4~15.0V,24h,Max. Current 0.3CA
Constant Current	-0.2Cx2h+0.1CAx12h
Fast	-0.2Cx2h+0.3CAx4.0h

Charging Procedures(6V series)

Application	Charge Voltage (V)			Max. Charge Current
	Temperature	Set point	Allowable range	
Cycle Us	25°	7.35	7.25~7.45	0.3C
Standby	25°	6.85	6.8~6.9	0.3C