NexSys™

POWER WHEN YOU NEED IT

NexSys® Battery and Charger System

Designed to change the way you work

EnerSys®

Power/Full Solutions





Faster, more flexible recharging puts you in charge

Designed for use with NexSys® batteries, NexSys battery chargers slash recharge times and allow for flexible opportunity charging while optimizing battery cycle life.

NexSys® —

The battery and charger system that will change the way you work

NexSys® batteries provide exceptional flexibility. Use them whenever you want and recharge them whenever you can – during breaks, or at the end of the shift. NexSys batteries can even be put back into service before they are fully charged.

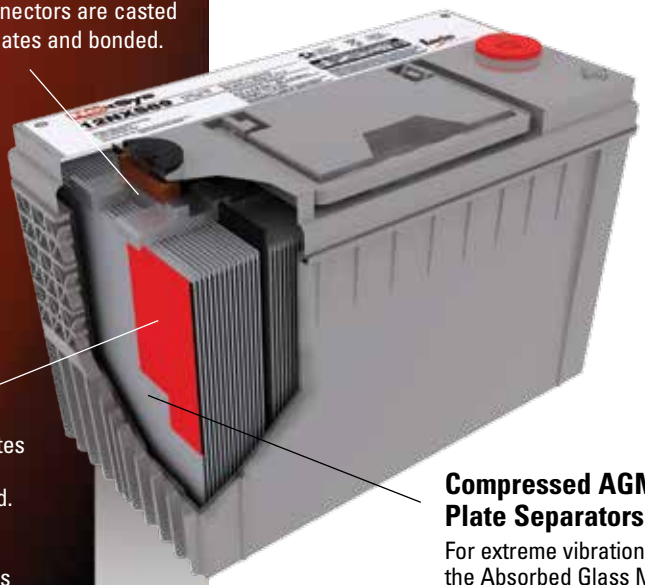
Combining advanced battery design technology with robust materials and construction, NexSys batteries also provide exceptional performance. Maintenance-free and highly resistant to shock and vibration, NexSys batteries will literally change the way you work.

Small traction applications include:

- Floor care/cleaning machines
- Pallet trucks
- Shuttle personnel carriers
- Industrial utility vehicles
- Automated Guided Vehicles (AGV)
- And many more...

Robust Intercell Connections

To resist vibration and eliminate internal sparking, cell connectors are casted to the plates and bonded.



- AGM design holds acid in place to prevent spills, even when installed on its side
- Up to two year shelf life at 77°F

Pure Lead Plates

To provide more power, the plates in our NexSys® batteries are constructed from 99% pure lead. The plates are extremely thin, so more of them can fit into the battery. More lead plates means more power.

Compressed AGM Plate Separators

For extreme vibration resistance, the Absorbed Glass Mat (AGM) plate separators are compressed before being inserted into the case.

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Benefits that conventional batteries can't match

Virtually maintenance-free, NexSys® batteries feature a superior quality AGM separator with high electrolyte absorption and stability to enhance cyclic capability. Positive and negative plates are low impedance, high corrosion resistant thin plate grids manufactured from pure lead in a unique process.

The result? NexSys batteries offer optimized cycling performance and rapid recharging that conventional lead acid batteries – gel or flooded – simply cannot. When used with an EnerSys® approved charger, NexSys batteries offer a wide range of benefits:

- High energy throughput – up to 180% of C_6 per 24 hours with an opportunity charging regime
- Long maintenance-free life cycle – up to 1,200 cycles at 60% DOD
- Extreme shock and vibration resistance
- Eco-friendly performance
- Minimum gassing: ideal for use in shops, public areas and sensitive manufacturing areas
- High recyclability
- Ideal for multi-shift operations
- Optimum machine availability
- Short recharge times – less than 3 hours at 60% DOD (with NexSys battery charger)
- Suitable for opportunity charging
- Long shelf life (up to two years at 77°F)
- Easy installation
- More power in less space – NexSys batteries typically occupy 30% less space than the equivalent lead calcium batteries

Technical Data

NexSys® Battery	Voltage (V)	Nominal AH Capacity @ the C_6 Rate	Nominal AH Capacity @ the C_{20} Rate	Dimensions (in)				Weight (lbs)	Standard Terminals	Terminal Adapter Options	Terminal Layout
				L	W	H	Term H				
12NXS26	12	26	30	9.84	3.82	5.79	5.67	21.1	M6 Female	A	1
12NXS36	12	36	42	9.84	3.82	7.76	7.64	29.0	M6 Female	A	1
12NXS38	12	38	44	7.74	6.50	6.69	6.37	38.4	M6 Female	A	1
12NXS50	12	50	57	8.66	4.76	9.92	9.76	41.1	M6 Female	A	1
12NXS61	12	61	67	11.02	3.82	10.39	9.76	42.0	M8 Female	-	2
12NXS62	12	62	71	12.95	6.54	6.85	6.54	53.2	M6 Female	A	1
12NXS85	12	85	104	15.55	4.13	10.39	9.76	60.0	M8 Female	-	2
12NXS89	12	89	102	12.99	6.79	8.43	8.62	77.4	3/8 -16″ Female	A	1
12NXS120	12	120	128	13.31	6.81	10.71	10.75	94.8	M6 Female	A	1
12NXS137	12	137	154	16.90	6.79	9.36	9.36	105.0	M6 Female	B	2
12NXS158	12	158	183	16.90	6.79	10.75	10.75	117.0	M6 Female	B	2
12NXS166	12	166	191	22.09	4.92	11.14	10.35	113.3	M8 Female	B	2
12NXS186	12	186	214	22.09	4.92	12.48	11.69	131.1	M8 Female	B	2

Option A: SAE post

Option B: M6 male front terminal adapter

Terminal layout 1

Terminal layout 2

Flexible connectors must be used for all monobloc connections.

EnerSys® approved fasteners must be used.

Selecting the correct battery, terminals and connection method

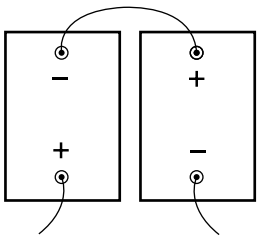
Determine your space restrictions
The first step is to access your battery compartment. The amount and shape of space available may influence which battery model and how many of them, can be used to fulfill your power needs. In many cases you may have several options to choose from. The difference being the amount of energy a battery provides, and how many batteries can be fitted in your available space. The best choice will depend on which battery or combination of batteries best fits your needs.

Note: Keep in mind that there must be sufficient space between batteries to allow for minor battery expansion during use. This assures proper airflow to keep battery temperature down in hot environments.

Determine your power needs
The next step is to determine the total voltage of your current system and whether or not this amount of energy was adequate or if more power is needed. If the battery being replaced provided sufficient power, a replacement battery with similar capacity can be used. If your current battery or batteries did not always meet your needs, a replacement battery with higher capacity (or multiple batteries with collectively more capacity) should be used.

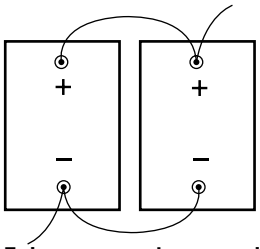
Determine which battery or combination of batteries is best
Next decide which battery and how many will best meet your power requirements based on your system's required voltage. The best choice may be influenced by the size of your battery compartment, your performance requirements, and cost considerations.

Series Connect



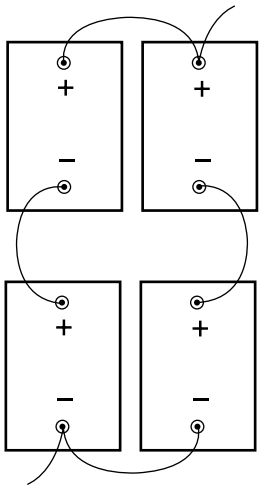
To increase voltage, connect batteries in series.

Parallel Connect



To increase amp-hour capacity, connect batteries in parallel.

Series/Parallel Connect



To increase both voltage and amp-hour capacity, connect batteries in series/parallel.

Note: Connecting batteries in a series does not increase the capacity of the batteries; it simply increases the overall voltage to meet your system requirements. If additional capacity is needed, you can connect multiple batteries in parallel as long as your equipment's voltage requirements are met. See diagrams.

Determine the optimum terminal and connection method
Finally, see which types of terminals are available for the battery you have selected and choose the best for your needs based on the type of cable connections you intend to use. When connecting your batteries, take care to use a proper cable size to avoid overheating your connections.

Note: For information regarding correct wire sizes you can refer to the National Electric Code or contact an EnerSys® representative.

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Power/Full Solutions

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