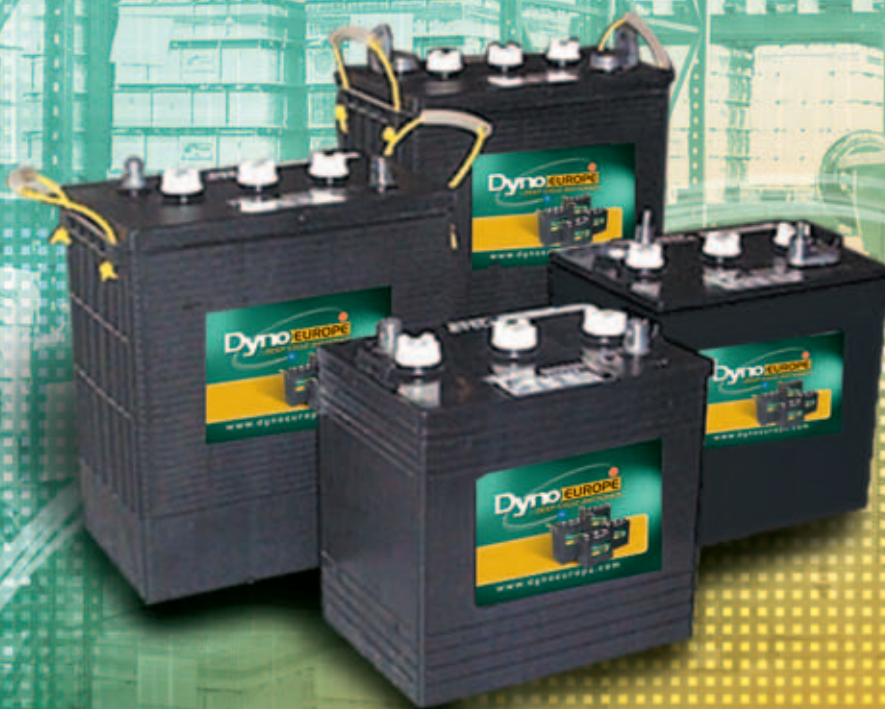


DynoEUROPE

The Battery Specialist

The right choice for performance at
www.dynoeurope.com



When it comes to your equipment, nothing is more important than reliable BATTERIES.

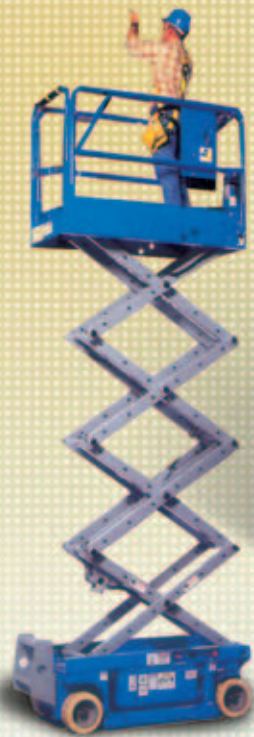
Dyno Europe uses the best materials available and the latest technology.

All Batteries, Chargers & Accessories

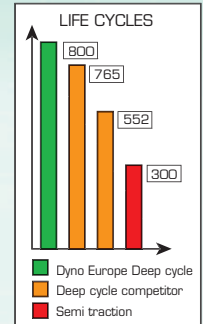
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US DEEP CYCLE BATTERIES (US Dimensions & Traction)

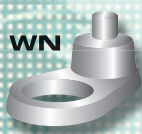
For applications which require a permanent and long-lasting supply of electrical energy: electric boom lifts, scissor lifts, industrial cleaning machinery, golf cars,...



These batteries are subject to deep discharge where plate erosion is substantial. To solve this problem, Dyno Europe uses high density oxide to create a stronger cohesive bond of the active material and Flex-Sil multirib separator which aids in deep cycle longer life. Dyno Europe deep cycle batteries have a proven track record for deep discharge service.



DYNO EUROPE	V	C20	C5	CCA0°F	RC75	RC25	 X x Y x H	kg	Qty/ pall.	Layout- Terminal		
6 volts deep cycle batteries												
GC2C	6	225	175		115		260	181	267	28,2	32	A-DP
GC2B	6	235	195		132		260	181	267	31,0	32	A-DP
GC2H	6	245	210		145		260	181	292	33,0	32	A-DP
S3H	6	250	216		140		298	183	286	30,5	24	A-DP
S3HH	6	275	228		155		298	183	286	33,0	24	A-DP
S4H	6	315	252		180		310	183	368	44,0	18	A-DP
S4HH	6	325	280		196		310	183	368	47,7	18	A-DP
L16	6	350	285		210		310	183	419	51,4	16	A-DP
L16H	6	395	320		225		310	183	419	55,0	16	A-DP
8 volts deep cycle batteries												
BVGC	8	165	146		85		262	181	283	29,1	32	A-DP
12 volts deep cycle batteries												
M24D	12	75	60			110	283	171	238	20,0	48	B-DT
M24DH	12	85	70			140	283	171	238	21,8	48	B-DT
M27D	12	105	75			130	334	171	238	23,2	36	B-DT
M27DH	12	115	90			170	334	171	238	26,4	36	B-DT
30H	12	115	90	560		200	327	171	248	28,0	32	B-DT
31H	12	140	110			200	334	175	238	30,5	32	B-DT
SSW	12	185	155		90		394	178	368	53,0	16	A-DP
SSWH	12	210	175		110		394	178	368	59,1	16	A-DP
H4D	12	180	155			385	518	221	249	52,0	18	A-DP
H8D	12	240	190			485	527	279	249	66,0	12	A-DP



DP-bolts M8 with screw (+ 8 mm hole) are included, also the nuts (5/16" unf) for WN/WNL

Save time, batteries and money :

use our automatic water filling system REF BS/FILL6V and REF BS/FILL12V

OPTIONAL



BS/21157: Quick Release

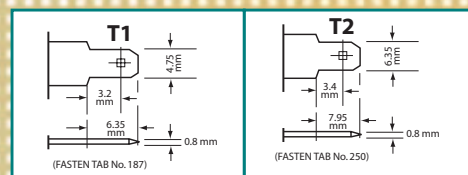
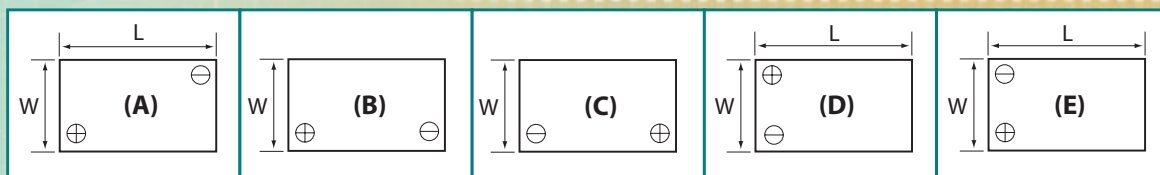


List of European Types of Traction- and Semi-Traction Batteries

Reference	Cross-ref.	V		C20	C5	T	 X x Y x H	Qt/pal	kg	Layout-Term
9.080.1	1.001.4	6		100 Ah	80 Ah	P	225 175 235	38	37,10	C-A
9.095.2	1.202.7	6		120 Ah	96 Ah	P	260 175 235	60	12,30	C-A
6PzS195	GC2D	6		240 Ah	185 Ah	T	243 190 276	38	32,00	C-A
9.180.1	240.15	6		240 Ah	185 Ah	P	244 190 275	38	36,20	C-A
6PzS205	GC2D-h	6		270 Ah	205 Ah	T	244 190 275	38	32,50	C-A
PzS320		6		425 Ah	320 Ah	T	311 185 360	28	50,00	C-A
9.540.1	550.39	12	K	50 Ah	36 Ah	P	205 175 190	96	12,60	C-A
2PzS38		12		50 Ah	38 Ah	T	205 175 190	96	13,50	C-A
9.550.2	565.28	12	K	60 Ah	50 Ah	P	242 175 190	76	14,80	C-A
9.555.1		12	K	80 Ah	65 Ah	P	270 175 225	76	19,00	C-A
2PzS50		12		65 Ah	50 Ah	T	268 175 208	80	20,00	C-A
3PzS57		12		72 Ah	57 Ah	T	278 175 190	80	18,00	C-A
9.560.2	580.24	12		75 Ah	60 Ah	P	275 175 190	60	22,10	C-A
3PzS75		12		90 Ah	75 Ah	T	302 175 230	56	27,00	C-A
9.575.1		12	K	90 Ah	75 Ah	P	353 175 190	48	26,00	C-A
9.580.3		12		100 Ah	80 Ah	P	305 175 227	56	25,70	C-A
9.580.2	600.16	12		110 Ah	95 Ah	P	415 175 215	40	30,00	C-A
9.580.4		12	K	115 Ah	98 Ah	P	335 175 230	36	28,50	C-A
9.590.3		12		120 Ah	90 Ah	P	308 174 225	56	24,90	C-A
4PzS90		12		120 Ah	90 Ah	T	344 172 238	48	39,00	C-A
9.820.0		12	K	125 Ah	100 Ah	P	360 253 235	27	48,00	C-A
9.600.2		12		130 Ah	106 Ah	P	345 175 283	36	38,10	C-A
9.605.1		12	K	140 Ah	115 Ah	P	510 189 223	28	39,20	D-A
9.600.2H		12		160 Ah	130 Ah	P	344 172 288	28	42,00	C-A
4PzS118		12		160 Ah	130 Ah	T	344 172 288	36	40,00	C-A
4PzS126		12		167 Ah	126 Ah	T	510 175 225	32	40,00	C-A
9.635.1	680.25	12	K	180 Ah	145 Ah	P	513 223 223	28	55,00	D-A
7PzS150		12		200 Ah	150 Ah	T	510 222 225	28	51,40	E-A
9.680.1L		12	K	200 Ah	170 Ah	P	517 275 239	18	69,50	D-A
9.680.1	730.11	12	K	230 Ah	185 Ah	P	518 273 240	18	64,40	D-A

P = Plates semi traction - T = Tubular traction - If the dimensions are critical please contact us!!!

K=Kamina cover with common gassing outlet for leisure (option on request)





GEL BATTERIES

Completely sealed gel-batteries for heavy cycling use (engine starting, floor cleaning machines, boats, golf caddy,...)

**100%
MAINTENANCE
FREE**

Reference	Volt	C20	C5	BCI	CCA(0°C)	 X x Y x H			Kg	Qty/ box	Layout- Term
DGY6-7.5EV	6	8Ah	5,6Ah		NA	150	34	101	1,3	600	B-T1
DGY6-10EV	6	10Ah	8Ah		NA	151	50	101	1,9	500	B-T1
DGY6-12EV	6	12Ah	10Ah		NA	151	50	101	2	500	B-T2
DGY6-110EV	6	110Ah	85Ah		1010A	193	168	205	16	60	A-M6
DGY6-160EV	6	165Ah	134Ah		1290A	298	171	226	26	32	A-M6
DGY6-180DEV	6	180Ah	160Ah		650A(din)	244	190	275	32,2	32	A-M8
DGY6-180EV	6	180Ah	142Ah	GC2	NA	260	179	275	30,1	32	A-M8
DGY6-200EV	6	200Ah	155Ah		1600A	318	170	225	31	32	A-M8
DGY12-7.5EV	12	7,7Ah	5,6Ah		NA	151	65	99	2,5	400	D-T1
DGY12-13EV	12	13,1Ah	9,9Ah		NA	150	97	99	4	250	D-T2
DGY12-16DEV	12	16Ah	13Ah		65A(din)	181	76	167	6,8	150	C-M5
DGY12-26EV	12	28Ah	20,7Ah		300A	165	174,5	125	8,8	100	C-M6
DGY12-30DEV	12	30Ah	24Ah		110A(din)	197	132	184	11,7	90	B-F
DGY12-33EV	12	33Ah	25,5Ah	U1	320A	193,5	130	166,5	10,9	90	B-M6
DGY12-40DEVs	12	38Ah	30Ah		140A(din)	210	175	175	15,1	60	C-A
DGY12-40DEV	12	40Ah	32Ah		175A(din)	210	175	175	13,4	60	C-F
DGY12-44EV	12	44Ah	32,9Ah		350A	196	164	170,5	14	60	C-M6
DGY12-55DEV	12	55Ah	44Ah		230A(din)	293	175	175	19,5	48	C-A
DGY12-55EV	12	55Ah		22NF	380A	228	137	207	17,5	48	B-M6
DGY12-60DEV	12	60Ah	48Ah		270A(din)	306	175	190	21,2	48	C-A
DGY12-65EV	12	65Ah	42,4Ah		NA	263	165	190	21,5	48	C-M6
DGY12-70EV	12	70Ah	55Ah	24	550A	350	167	179	22,1	36	B-M6
DGY12-80EV	12	75Ah	60Ah	24	NA	259	168	208	23	36	B-M6
DGY12-80DEV	12	80Ah	64Ah		340A(din)	376	175	190	26,8	36	C-A
DGY12-85DEV	12	85Ah	68Ah		270A(din)	330	171	236	30	36	B-A
DGY12-100EV	12	100Ah		27	780A	305	168	208	28,4	36	B-M6
DGY12-110EV	12	110Ah	85Ah	31	960A	332	174	213	32,2	32	B-M6
DGY12-110DEV	12	110Ah	88Ah		450A(din)	286	269	230	40	24	A-A
DGY12-120DEV	12	120Ah	96Ah		450A(din)	513	189	223	40,7	24	D-A
DGY12-120DEVs	12	120Ah	96Ah		400A(din)	340	173	280	40,5	24	B-M6
DGY12-140DEV	12	143Ah	115Ah		540A(din)	513	223	225	47,8	24	D-A
DGY12-150EV	12	150Ah	117Ah		1300A	482	170	242	44,3	20	B-M6
DGY12-160EV	12	165Ah		4D	1440	530	209	214	45	20	E-M6
DGY12-200EV	12	200Ah	155Ah		1670A	520	240	220	66	12	E-M8
DGY12-225EV	12	225Ah		8D	NA	521	269	203	69	12	E-M8
DGY12-210DEV	12	210Ah	160Ah		630A(din)	518	291	242	70	12	D-A

Dry Cell Maintenance Free Deep Cycle (traction) Batteries

Completely sealed batteries for cyclic use which can be discharged 100%
- used for cleaning machinery, aerial equipment,...operating temperature
-40°C up to 60° celcius.

**Ultra Heavy Duty
100% Discharge**

Reference	Volt	C20	C5	BCI	RC25A	CCA	 X x Y x H			Kg	Qty/pal	Layout- Term
MFDC45	12V	45Ah	38Ah		75	NA	197	165	176	16	64	B-M6
MFDC75	12V	75Ah	68Ah	24	150	NA	261	173	200	27,3	40	B-M6
MFDC80	12V	80Ah	70Ah	27	180	NA	331	165	176	27,3	40	B-M8
MFDC110	12V	110Ah	90Ah	31	200	NA	341	173	213	37,8	24	B-M8
MFDC140	12V	140Ah	120Ah			NA	344	173	274	54	20	B-M8

Dry cell maintenance free deep cycle battery's are especially developed for extreme performance under all conditions. Due to the very high selection of the materials, this battery offers superior discharge performance, Best available maintenance-free battery cycle life and vibration resistance. Leak free.
This is the only true maintenance-free deep cycle battery capable of delivering 100% depth of discharge. Of course, when this battery is mainly discharged similar like a gel-battery, the cycle life exceeds this of the gel-battery. 2 years shelf live. Compatible with standard charging equipment and can be "convenience charged"during breaks to ensure peak performance

AGM BATTERIES for cycling use (Maintenance Free AGM Cyclic)

Completely sealed AGM-batteries for cycling applications (cleaning machines, electrical vehicles, wheel chairs, motor homes,...)



Reference	Volt	C20	C5	R75A	CCA	 $X \times Y \times H$			Kg	Qty/pal	Layout-Term
MFAC33	12V		33Ah		NA	207	175	190	13,6	60	C-A
MFAC45	12V		45Ah		NA	242	175	190	16,2	57	C-A
MFAC50	12V		50Ah		NA	278	175	190	18,4	48	C-A
MFAC60	12V		60Ah		NA	353	175	190	22,6	36	C-A

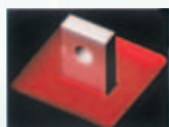
Terminal layout details

 (A)	 (B)	 (C)	 (D)	 (E)	 T1	 T2
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Terminals and adapter



Description	Reference	
J-type adapter M5	DJ-M5	one set is 2 adapters
J-type adapter M6	DJ-M6	one set is 2 adapters
J-type adapter M8	DJ-M8	one set is 2 adapters



automotive (A)
on request



insert (M...) standard



J type
on request



Lead Flag (F)
on request



Copper Flag
on request



MAINTENANCE FREE STARTER BATTERIES



V/Ah-A (EN)	Dimensions	DIN
X1 12/45 - 410 B3 (+B4)	207 x 175 x 175 mm	53646, 53653, 53654, 54045, 54317*, 54459, 54465, 54469, 54519
X2 12/62 - 540 B3 (+B4)	242 x 175 x 175 mm	55035, 55040, 55044, 55056, 55427*, 55559, 55566, 56073, 56077, 56111, 56219
X3 12/75 - 640 B3 (+B4)	278 x 175 x 175 mm	56318, 56323*, 56420, 56530, 56647, 56818*, 57113, 57114*, 57220, 57230, 57412, 57540
X5 12/100 - 850 B3	353 x 175 x 190 mm	58827, 58838, 59218, 59220, 59226, 60038, 60044

AQ-TRON

A practical 12-hours charger to keep your battery in TOP CONDITION !!!

- MINIMAL DIMENSIONS
- STRONG HOUSING
- SIMPLE OPERATION
- CLEAR INDICATION OF THE CHARGING CYCLE
- EGALISATION CHARGE
- SAFETY TIMER
- CE-LABEL
- MAINS ADJUSTABLE
- ALL CABLES PRESENT

Reference	Type			Capacity 'Ah/5h'		 X x Y x H
	Tension (V)	Current (A)	AC-mains	Minimum	Maximum	
AQ12M15	12V	15A	230V	75Ah	115Ah	250 x 160 x 180
AQ12M20	12V	20A	230V	110Ah	155Ah	250 x 160 x 180
AQ12M25	12V	25A	230V	140Ah	190Ah	250 x 160 x 180
AQ12M30	12V	30A	230V	170Ah	230Ah	340 x 260 x 260
AQ24M10	24V	10A	230V	55Ah	80Ah	250 x 160 x 180
AQ24M15	24V	15A	230V	75Ah	115Ah	250 x 160 x 180
AQ24M20	24V	20A	230V	110Ah	155Ah	250 x 160 x 180
AQ24M25	24V	25A	230V	140Ah	190Ah	340 x 260 x 260
AQ24M30	24V	30A	230V	170Ah	230Ah	340 x 260 x 260
AQ24M40	24V	40A	230V	220Ah	310Ah	340 x 260 x 260
AQ24M50	24V	50A	230V	290Ah	380Ah	340 x 260 x 260
AQ24M60	24V	60A	230V	360Ah	480Ah	340 x 260 x 260
AQ36M20	36V	30A	230V	110Ah	155Ah	340 x 260 x 260
AQ36M25	36V	25A	230V	140Ah	190Ah	340 x 260 x 260
AQ36M30	36V	30A	230V	170Ah	230Ah	340 x 260 x 260
AQ36M40	36V	40A	230V	220Ah	310Ah	340 x 260 x 260
AQ36M50	36V	50A	230V	290Ah	380Ah	340 x 260 x 260
AQ36M60	36V	60A	230V	360Ah	480Ah	500 x 350 x 400
AQ48M50	48V	50A	230V	290Ah	380Ah	500 x 350 x 400
AQ48M60	48V	60A	230V	360Ah	480Ah	500 x 350 x 400
AQ48T60	48V	60A	3X400V	360Ah	480Ah	500 x 350 x 400
AQ48M80	48V	80A	230V	460Ah	610Ah	500 x 350 x 400
AQ48T80	48V	80A	3X400V	460Ah	610Ah	500 x 350 x 400
AQ48T100	48V	100A	3X400V	600Ah	750Ah	500 x 360 x 900
AQ48T120	48V	120A	3X400V	750Ah	900Ah	500 x 360 x 900
AQ80T80	80V	80A	3X400V	450Ah	610Ah	500 x 360 x 900
AQ80T100	80V	100A	3X400V	600Ah	750Ah	500 x 360 x 900
AQ80T120	80V	120A	3X400V	750Ah	900Ah	500 x 360 x 900

The 3-phase chargers are standard 3 x 400V, but can be modified to 3 x 230V.



STANDARD BUILT-IN CHARGERS

Characteristics

- Charging control by microprocessor
- Status of the charging by 3 leds
- Indication of the Main Alarms
- Equalization and maintenance Charging
- IULa/IULo charging cycle (DIN 41774)
- Final Charge Time adjustable
- Charging within 12 hours
- Double power supply (AC/DC)
- Lock-out relais

Reference *	Nominal batt. vol- tage	Output current	Recommended battery capacity	 X x Y x H	Weight
NRG1 FC 12/30	12	30	155 - 250/5h	300 x 180 x 210	15 kg
NRG1 FC 12/40	12	40	195 - 330/5h	300 x 180 x 210	16 kg
NRG1 FC 24/20	24	20	95 - 165/5h	300 x 180 x 210	16 kg
NRG1 FC 24/25	24	25	125 - 205/5h	300 x 180 x 210	17 kg
NRG1 FC 24/30	24	30	155 - 250/5h	300 x 180 x 210	18 kg
NRG1 FC 24/40	24	40	195 - 330/5h	300 x 180 x 210	19 kg
NRG1 FC 36/25	36	25	95 - 165/5h	300 x 180 x 210	17 kg
NRG1 FC 36/30	36	30	155 - 250/5h	300 x 180 x 210	19 kg
NRG1 FC 36/40	36	40	195 - 330/5h	300 x 180 x 210	24 kg
NRG1 FC 48/20	48	20	155 - 250/5h	300 x 230 x 260	25 kg
3IPM 48/30	48	30	195 - 330/5h	280 x 180 x 250	26 kg
3IPM 48/40	48	40	250 - 415/5h	280 x 180 x 250	27 kg

* Also other types available

High-Frequency Battery Charger, **WATERPROOF SEALING IP66**



Technical information:

- 1) Convection cooling waterproof sealing IP66
- 2) Worldwide AC input with automatic selection.
90~132Vac/180~264Vac 50/60 Hz
- 3) UL and CE approvals to compliment A)
- 4) Modern high frequency switching type with microprocessor control
- 5) Ideal constant current – constant voltage charge curve IUoU
- 6) Short circuit, reverse battery polarity, over/under AC input voltage, overheat protection with no fuses to blow and automatic recovery from faults
- 7) Over-ride charge timer and bad battery detection (dV/dt)
- 8) Auto-Restart charging , bad cell Discrimination 18 hours
- 9) Extremely low voltage charging. The charger will charge very deeply discharged batteries greater than 1~2 Vdc.
- 10) Efficiency more than 85%
- 11) Lock-out relay 20A, normally closed

Reference	V dc	Curr Dc	Watt	Lock	Curve	Recommended battery capacity		 X x Y x H			Kg
						min Ah C20	max Ah C20				
AQHF12-09	12	9A	140	y	wet/gel	45	130	194	151	81	2 kg
AQHF12-15	12	15A	230	y	wet/gel	65	215	219	152	81	2,5 kg
AQHF24-05	24	5A	150	y	wet/gel	30	75	176	142	61	1,2 kg
AQHF24-08	24	8A	245	y	wet/gel	40	115	194	152	81	2 kg
AQHF24-11	24	11A	300	y	wet/gel	55	160	219	152	81	2,5 kg
AQHF24-19	24	19A	600	y	wet/gel	100	275	196	180	165	6,5 kg
AQHF24-25	24	25A	750	y	wet/gel	125	355	196	180	165	5 kg
AQHF36-20	36	20A	900	y	wet/gel	100	290	306	180	165	8,5 kg
AQHF48-17	48	17A	1000	y	wet/gel	90	240	306	180	165	8,5 kg

ZIVAN High Frequency Chargers



Reference*	Nominal batt. volt.	Output current	Recommended batt. capacity	 X x Y x H	Weight
UBC 12/18	12	18	60-150/5h	230 x 110 x 65	0,85 kg
UBC 24/15	24	15	45-130/5h	230 x 110 x 65	0,85 kg
BC1 12/15	12	15	100 - 160/5h	285 x 105 x 75	1,5 kg
BC1 12/30	12	30	160 - 240/5h	285 x 105 x 75	1,5 kg
NG1 12/50	12	50	250 - 500/5h	300 x 160 x 80	2,2 kg
BC1 24/20	24	20	80 - 160/5h	285 x 105 x 75	1,5 kg
BC1 24/25	24	25	150 - 200/5h	285 x 105 x 75	1,5 kg
BC1 24/30	24	30	200 - 250/5h	285 x 105 x 75	1,5 kg
NG1 24/40	24	40	160 - 360/5h	300 x 160 x 80	2,2 kg
NG1 36/20	36	20	100 - 200/5h	300 x 160 x 80	2,2 kg
NG3 36/60	36	60	300 - 600/5h	425 x 215 x 90	5,5 kg
NG3 48/30	48	30	150 - 300/5h	425 x 215 x 90	5,5 kg
NG3 48/50	48	50	250 - 500/5h	425 x 215 x 90	5,5 kg

* Also other types available



Lestronic Battery Charger

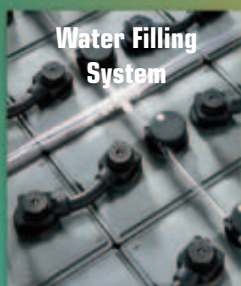
Dyno Europe is also able to offer a complete service for **Lestronic** battery chargers. They have a complete stock of all original service parts and most popular charger types. Defective **Lestronic** chargers can be sent to the local Dyno Europe dealers all over Europe. Trained service-people are ready to repair all **Lestronic** chargers.

Reference	Nominal batt. voltage	Output Current	Input	Battery capacity		 X x Y x H	Weight
				8h	12h		
12LC15-2ET	12	15	220	70	140	220 x 164 x 168/208	7.3 kg
24LC15-2ET	24	15	220	70	140	220 x 164 x 168/208	7.7 kg
24LC20-8ET	24	20	220	95	190	241 x 220 x 205/256	12.7 kg
24LC25-8ET	24	25	220	120	240	241 x 220 x 205/256	13,6 kg
24LC40-8ET	24	40	220	180	360	281 x 220 x 251/300	16,3 kg
36LC20-8ET	36	20	220	95	190	241 x 220 x 205/256	14 kg
36LC25-8ET	36	25	220	120	240	241 x 220 x 205/256	15 kg
48LC25-8ET	48	25	220	120	240	281 x 220 x 251/300	17,7 kg
48LC50-8ET	48	50	220	225	480	383 x 220 x 251/300	38,6 kg

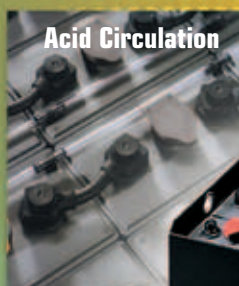
TRACTION BATTERIES



Flexible Connector



Water Filling System



Acid Circulation

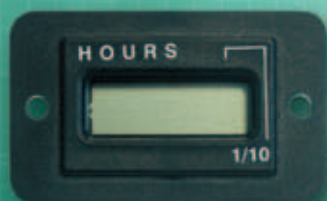


BATTERY CONNECTORS



DC-DC CONVERTORS

BATTERY INDICATORS



BS 32562	BS 32146	BS 32561
Hour meter	Battery discharge indicator	Battery discharge indicator + hourmeter
12V - 48V	12V - 24V	24V - 80V
52 x 30 mm	52 x 30 mm	Ø 52 mm



SEMI-TRACTION MONOBLOC



SEMI-TRACTION DEEP CYCLE



TRACTION BATTERIES



CONNECTORS



INDICATORS



BATTERY CHARGERS



HIGH FREQUENCY CHARGERS



ACCESSORIES

Sales points