



PULS CHARGER

Banner

Banner PULS Charger

Banner's PULS charger family, which has been in operation for many years, is characterised by robustness, high levels of reliability and optimum cost-efficiency. The chargers use proven pulse charging on the basis of a Wa-characteristic as a standard process.

Banner's PULS chargers stand out due to a reduced water requirement and less gas development in the recharging phase, in combination with smaller correlations as compared to conventional Wa or Wsa charging. Therefore, they represent an economic system for traction battery charging.

Areas of application

- Stackers
- Sweeping machines
- Lifting platforms
- Special applications
- Haulers
- Etc.

Features

- Modern pulse charging system for wet batteries
- Charging times of 6.5 – 14 h possible
- Reduced battery water consumption and thus low maintenance
- Less gas development in the recharging phase, calculation according to the ZVEI instruction sheet "Ventilation of battery spaces for traction batteries"
- Automatic charging and equalisation charging
- Energy-saving and battery-protective through variable recharging time (longer battery service life)
- Simple operation, as due to the automatic charging start, switching on cannot be forgotten
- Charging status light system

Options

- Electrolyte circulation
- Aquamatic





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Initial voltage	Battery capacity [Ah]*		Output current [A]	Mains current [A]	Box	Weight/ kg	Banner Puls charger type	Art.No.
	Charging time 7,5 - 9 h	Charging time 11 - 14 h						
24 V	85 - 110	120 - 160	10	16	FWT 1	9	E 230 G 24/ 10	0434030100
	110 - 130	160 - 220	16	16	FWT 1	10	E 230 G 24/ 16	0434030200
	126 - 160	200 - 260	20	16	FWT 1	12	E 230 G 24/ 20	0434030300
	150 - 190	240 - 310	25	16	FWT 1	13	E 230 G 24/ 25	0434030400
	180 - 230	280 - 375	30	16	FWT 1	16	E 230 G 24/ 30	0434030500
	240 - 300	360 - 495	40	16	FWT 2	24	E 230 G 24/ 40	0434030600
	315 - 400	500 - 620	50	16	FWT 2	25	E 230 G 24/ 50	0434030700
	380 - 460	560 - 735	60	16	FWT 2	26	E 230 G 24/ 60	0434030800
	440 - 540	640 - 840	70	16	FWT 2	27	E 230 G 24/ 70	0434030900
	500 - 600	735 - 950	80	16	FWT 2	27	E 230 G 24/ 80	0434031000
	550 - 675	805 - 1085	90	16	FWT 2	31	E 230 G 24/ 90	0434031100
	650 - 805	1000 - 1240	100	16	FWT 2	36	D 400 G 24/100	0434031200
	800 - 945	1240 - 1550	125	16	FST 1	50	D 400 G 24/125	0434031300
	930 - 1125	1395 -	150	16	FST 1	63	D 400 G 24/150	0434031400
	1085 - 1260	-	170	16	FST 1	68	D 400 G 24/170	0434031500
48 V	110 - 130	160 - 220	16	16	FWT 1	17	E 230 G 48/ 16	0434033100
	126 - 160	200 - 260	20	16	FWT 2	19	E 230 G 48/ 20	0434033200
	150 - 190	240 - 310	25	16	FWT 2	21	E 230 G 48/ 25	0434033300
	180 - 230	280 - 375	30	16	FWT 2	22	E 230 G 48/ 30	0434033400
	240 - 300	360 - 495	40	16	FWT 2	28	E 230 G 48/ 40	0434033500
	315 - 400	500 - 620	50	16	FWT 2	36	D 400 G 48/ 50	0434033600
	380 - 460	560 - 735	60	16	FST 1	48	D 400 G 48/ 60	0434033700
	440 - 540	640 - 840	70	16	FST 1	58	D 400 G 48/ 70	0434033800
	500 - 600	735 - 950	80	16	FST 1	65	D 400 G 48/ 80	0434033900
	550 - 675	805 - 1085	90	16	FST 1	65	D 400 G 48/ 90	0434034000
	650 - 805	1000 - 1240	100	16	FST 1	66	D 400 G 48/100	0434034100
	800 - 945	1240 - 1550	125	16	FST 1	77	D 400 G 48/125	0434034200
	930 - 1125	1395 -	150	20	FST 1	87	D 400 G 48/150	0434034300
	1085 - 1260	-	170	25	FST 1	90	D 400 G 48/170	0434034400
80 V	126 - 160	200 - 260	20	16	FWT 2	25	E 230 G 80/ 20	0434034500
	150 - 190	240 - 310	25	16	FWT 2	27	E 230 G 80/ 25	0434034600
	180 - 230	280 - 375	30	16	FWT 2	31	D 400 G 80/ 30	0434034700
	240 - 300	360 - 495	40	16	FST 1	40	D 400 G 80/ 40	0434034800
	315 - 400	500 - 620	50	16	FST 1	63	D 400 G 80/ 50	0434034900
	380 - 460	560 - 735	60	16	FST 1	66	D 400 G 80/ 60	0434035000
	440 - 540	640 - 840	70	16	FST 1	69	D 400 G 80/ 70	0434035100
	500 - 600	735 - 950	80	20	FST 1	76	D 400 G 80/ 80	0434035200
	550 - 675	805 - 1085	90	20	FST 1	81	D 400 G 80/ 90	0434035300
	650 - 805	1000 - 1240	100	25	FST 1	84	D 400 G 80/100	0434035400
	800 - 945	1240 - 1550	125	35	FST 1	116	D 400 G 80/125	0434035500
	930 - 1125	1395 -	150	35	FST 1	131	D 400 G 80/150	0434035600
	1085 - 1260	-	170	50	FST 1	147	D 400 G 80/170	0434035700

Technical changes reserved

* Reference values; follow battery manufacturer's instructions

Charging times:

The charging time is dependent upon the discharge status of the battery to be charged and the correlation of the device current to battery capacity.

The current correlations relate to 80% discharged batteries.

Box dimensions [mm]			
Type	Height	Width	Depth
FWT 1	220	365	268
FWT 2	262	504	332
FST 1	690	506	490

Presented by:

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