

# Technical data sheet

Battery motor FBM-B 3100 for COMBIFLUX pump FP 314



More than just pumps

## Battery motor FBM-B 3100



### Special features:

- ▶ Motor is protected against medium steam by double-walled construction
- ▶ Speed controlled by micro-processor
- ▶ Electronic temperature control
- ▶ Anti-lock system
- ▶ Overload protection
- ▶ Battery is protected by automatic switch-off if the battery is empty
- ▶ Soft start

Motor type	Storage of motor	Nominal power [W]	Speed [rpm]	Speed control	Allowed ambient temperature in operation [°C]	Allowed ambient temperature on storage [°C]	Max. viscosity [mPas]	Protection class (with protection cover)	Weight motor with battery and protection cover [kg]
brushless	ball bearing	100	5 000 - 15 000	stepless speed adjustment	0 to +40	-20 to +60	250	IP 44	1,2

## Battery B15-3100



### Special features:

- ▶ Overload protection of individual cells
- ▶ Deep discharge protection of individual cells
- ▶ Short-circuit fuse
- ▶ Overcurrent protection
- ▶ Sleep mode

Type	Nominal voltage [V]	Nominal capacity [Ah]	Allowed ambient temperature in operation [°C]	Optimal ambient temperature on storage [°C]	Allowed ambient temperature on storage [°C]	Dimensions [mm] l x w x h	Weight [g]
Li-ions	18	1,5	0 to +40	0 to +10	-20 to +60	115 x 75 x 46	350

## Charger BCH-3100



### Special features:

- ▶ Fast charger
- ▶ Electronic temperature control
- ▶ Reverse-polarity protection
- ▶ Defective battery detection
- ▶ Microprocessor-controlled charging
- ▶ LED status display

Nominal voltage [V]	Power frequency [Hz]	Charging time [min]	Allowed temperature loading range [°C]	Allowed ambient temperature on storage [°C]	Insulation class of transformer	Protection class	Cable length [m]	Type of plug	Dimensions [mm] l x w x h	Weight [g]
220-240	50-60	30	+5 to +40	-20 to +60	T40/E	IP 30	2	CEE 7/16	152 x 86 x 92	500
100-120	50-60	30	+5 to +40	-20 to +60	T40/E	IP 30	2	NEMA 1-15 P	152 x 86 x 92	500

# Technical data

## COMBIFLUX pump FP 314 with battery motor FBM-B 3100

### COMBIFLUX pump FP 314



Type	FP 314 PVDF-25/19	FP 314 PP-25/19	FP 314 PP-32/25	FP 314 S-28/25
Type of seal	sealless			
Immersion length	500/700/1 000 mm		500/700/1 000/1 200 mm	
Outer Ø [mm]	25		32	28
Connection thread	G1 A*			G ¾ A
Materials in contact with the medium	PVDF, ETFE, PTFE/carbon, Hastelloy C	PP, ETFE, PTFE/carbon, Hastelloy C		Stainless steel (316 Ti), ETFE, PTFE/carbon
Viscosity max.	250 mPas			
Temperature of medium max.	60 °C	45 °C		60 °C
Weight [kg] at a length of 500/700/1 000/1 200 mm	0.3/0.3/0.4	0.3/0.3/0.4	0.3/0.3/0.4/0.6	1.0/1.1/1.5/1.9

\*Hose connections DN 13 and DN 19 included

### Battery motor FBM-B 3100 (18 V; 1.5 Ah) with COMBIFLUX pump FP 314

#### Performance data

Speed	Delivery rate Q max. [l/min] at:		Delivery head H [mWs]** at:		Total quantity max. [l] with one battery charge at:		Battery runtime [min]* with one battery charge at:	
	5 000 rpm	15 000 rpm	5 000 rpm	15 000 rpm	5 000 rpm	15 000 rpm	5 000 rpm	15 000 rpm
FP 314 PP/PVDF-25/19	12	38	0.4	5	1 400	760	120	20
FP 314 PP-32/25	20	54	1	6,5	2 000	750	100	14 <sup>1</sup>
FP 314 S-28/25	20	60	1.1	7	2 000	840	100	14 <sup>1</sup>

<sup>1</sup> at length of 1 200 mm 10 min

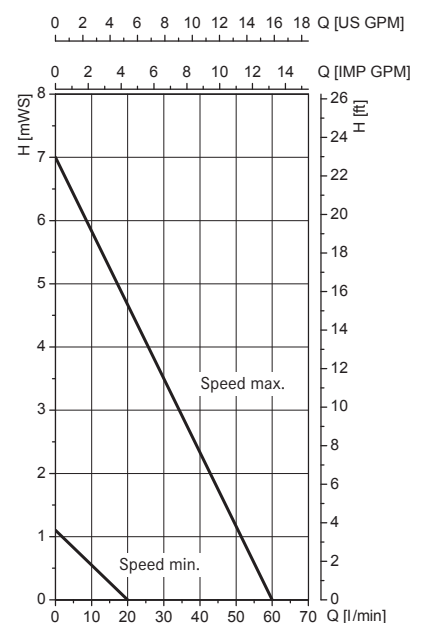
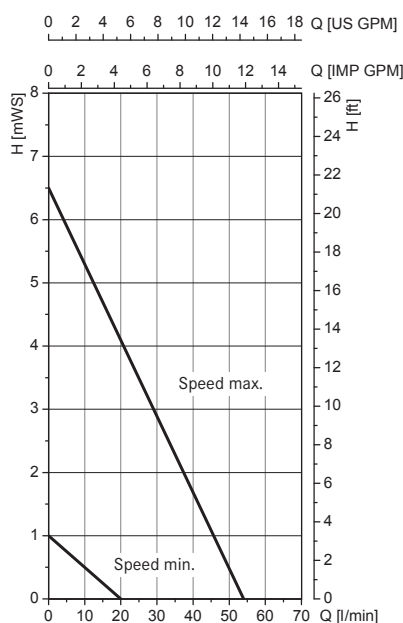
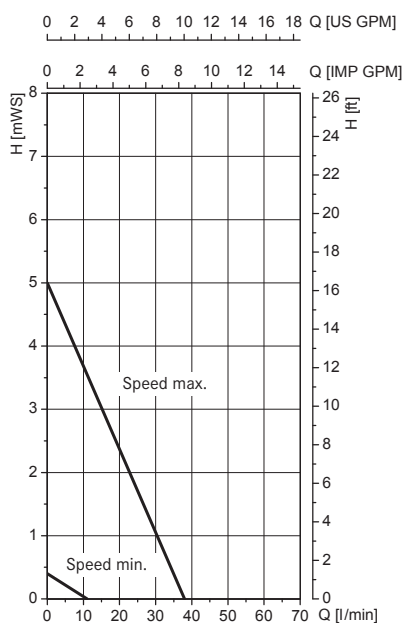
#### Performance charts\*

Battery motor FBM-B 3100 with COMBIFLUX pump:

FP 314 PP/PVDF-25/19

FP 314 PP-32/25

FP 314 S-28/25



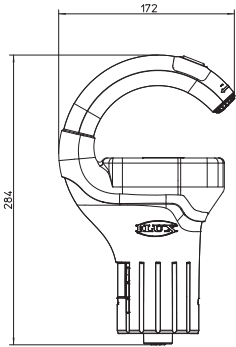
Speed min. 5 000 rpm, speed max. 15 000 rpm

\* measured with free outlet, water at 20 °C, values ± 10 %

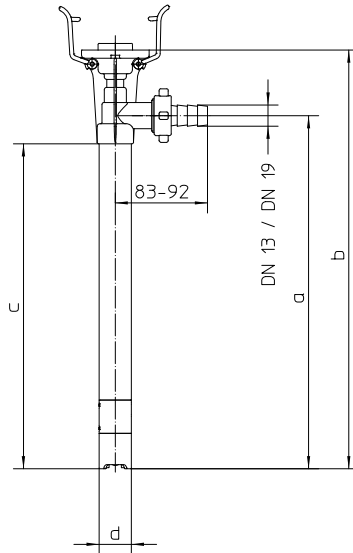
\*\* measured with water at 20 °C

## Dimensions [mm]

### Battery motor FBM-B 3100



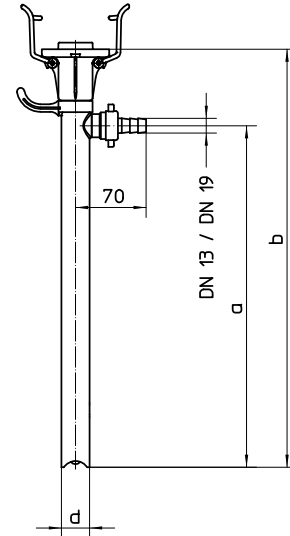
### FP 314 PP+PVDF without motor



Immersion length	a	b	c	d	
1200	1200	1538	1172	Ø 32	
1000	1000	1338	972	Ø 32	
700	700	1038	672	Ø 25	Ø 32
500	500	838	472	Ø 32	

Dimensions in mm

### FP 314 S without motor



Immersion length	a	b	d
1200	1189	1538	Ø 28
1000	989	1338	
700	689	1038	
500	489	838	

Dimensions in mm

## COMBIFLUX pump kits

Pump kit	FP 314 PP-25/19	FP 314 PP-32/25	FP 314 PP/S-32/25 AdBlue® version
Motor	Battery motor FBM-B 3100 18 V/ 1.500 mAh		
Charger	220-240 V/ 50-60 Hz		
Outer tube material	polypropylene		
Seal type	sealless		
Shaft material	Hastelloy C		stainless steel
Immersion length [mm]	700/1000	1000	1000
Outer Ø [mm]	25	32	
Hose connector	DN 13	DN 19	
Hose material	PVC		
Hose length [m]	1,5		2
Hose Ø	DN 13	DN 19	
Hand nozzle material/seal	PP/FKM		
Connection hand nozzle	DN 13	DN 19	
Hand nozzle outlet Ø [mm]	11	22	19
Weight [kg]	2,4/2,6	2,4	2,4

# Part numbers

COMBIFLUX FP 314 with battery motor FBM-B 3100 and accessories

## Battery motor FBM-B 3100 and accessories

Description	Part no.
FBM-B 3100 (Protection cover, battery, charger 220-240 V/50 - 60 Hz)	301 01 000
FBM-B 3100 (Protection cover, battery, charger 100-120 V/50 - 60 Hz)	301 01 003
FBM-B 3100 (Protection cover, battery, without charger)	301 01 001
Battery B15-3100	301 02 001
Protection cover for motor FBM-B 3100	301 02 005
Charger BCH-3100; 220-240 V/50 - 60 Hz	301 02 003
Charger BCH-3100; 100-120 V/50 - 60 Hz	301 02 004

## COMBIFLUX pump FP 314

Immersion length [mm]	Pump type	FP 314 PP-25/19	FP 314 PP-32/25	FP 314 PVDF-25/19	FP 314 S-28/25
		Part no.			
500		314 45 905	314 46 905	314 65 905	314 26 905
700		314 45 907	314 46 907	314 65 907	314 26 907
1 000		314 45 910	314 46 910	314 65 910	314 26 910
1 200		-	314 46 912	-	314 26 912

## COMBIFLUX pump kits with battery motor 220-240 V/50-60 Hz

Pump type	Immersion length [mm]	Outer ø [mm]	Part no.
FP 314 PP	700	25	314 48 807
FP 314 PP	1 000	25	314 48 810
FP 314 PP	1 000	32	314 49 910
FP 314 PP/S AdBlue®	1 000	32	314 49 ZV2

### Other accessories:

We offer the appropriate accessories for the COMBIFLUX, such as: hand nozzles, hoses, compression glands or liquid meters.

See our brochure for accessories and the price list for the precise specifications.