

Technical data sheet

Battery motor FBM-B 3100 for COMBIFLUX pump FP 314



We deliver values.

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 PP-25/19	FP 314 PP-32/25	FP 314 PVDF-25/19	FP 314 S-28/25
Type of seal	sealless			
Immersion length	500/700/1,000 mm			
Outer Ø	25 mm	32 mm	25 mm	28 mm
Connection thread	G1 A*			G ¾ A
Materials in contact with the medium	PP, ETFE, PTFE/carbon, Hastelloy C		PVDF, ETFE, PTFE/carbon, Hastelloy C	Stainless steel (316 Ti), ETFE, PTFE/carbon
Viscosity max.	250 mPas			
Temperature of medium max.	45 °C	45 °C	60 °C	60 °C
Weight [kg] at a length of 500/700/1,000 mm	0.3/0.4/0.4	0.3/0.4/0.4	0.3/0.4/0.4	1.0/1.1/1.4

*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
FP 314 S-28/25	20	60	1.1	7	2,000	840	100	14

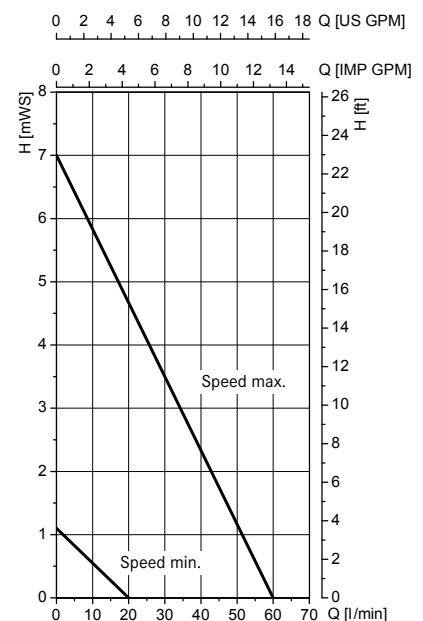
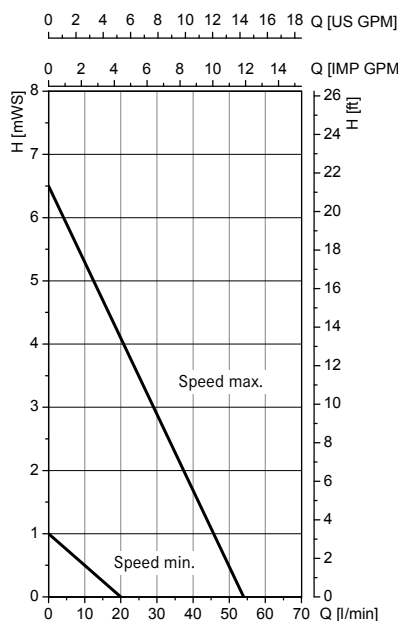
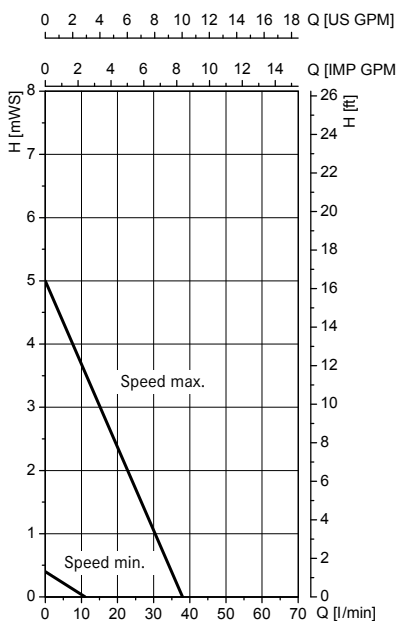
Performance charts*

Battery motor FBM-B 3100 with COMBIFLUX pump:

FP 314 PP/PVDF-25/19

FP 314 PP-32/25

FP 314 S-28/25



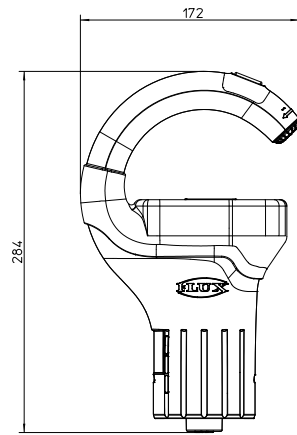
Speed min. 5,000 rpm, speed max. 15,000 rpm

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

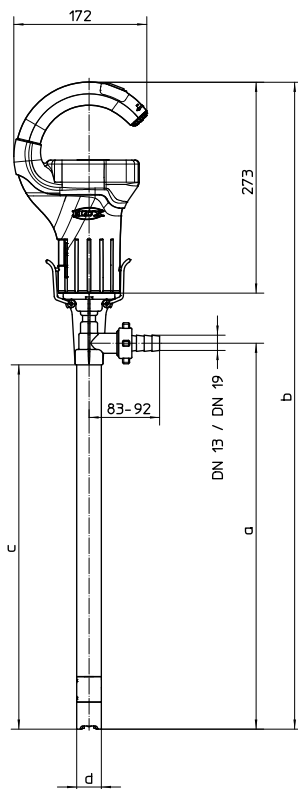
** measured with water at 20 °C

Dimensions [mm]

Battery motor FBM-B 3 100



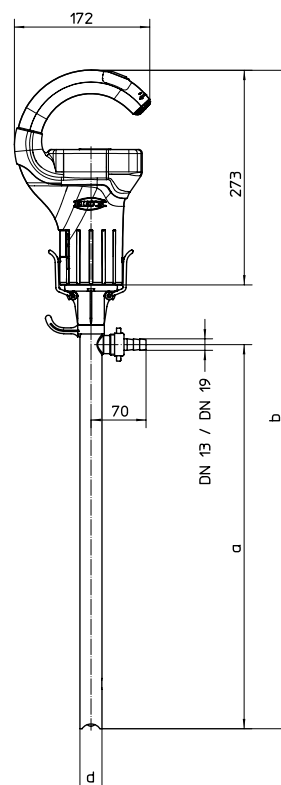
COMBIFLUX FP 314 PP/PVDF
with motor FBM-B 3 100



Immersion length	a	b	c	d	
1,000	1,000	1,338	972	Ø 25	Ø 32
700	700	1,038	672		
500	500	838	472		

Dimensions in mm

COMBIFLUX FP 314 S
with motor FBM-B 3 100



Immersion length	a	b	d	
1,000	989	1,338	Ø 28	
700	689	1,038		
500	489	838		

Dimensions in mm

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

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.

Technical data sheet

Commutator motor FEM 3070 and COMBIFLUX pump FP 314



We deliver values.

Commutator motor FEM 3070



Special features:

- ▶ With mains connection
- ▶ Internal ventilated commutator motor
- ▶ Double insulated - protection class II
- ▶ Two step speed adjustment
- ▶ With overload cut-out switch
- ▶ 230 Volt version VDE-GS approved
- ▶ Ergonomic design handle - one-handed operation

Motor type	Storage of motor	Speed control	Allowed ambient temperature in operation [°C]	Allowed ambient temperature on storage [°C]	Max. viscosity [mPas]	Protection class	Weight [kg]	Protection class
internally ventilated commutator motor	ball-bearing	2-steps	-20 to +40	-20 to +60	250	IP24	1,5	II

Nominal voltage [V]	Power frequency [Hz]	Rated power [W]	Type of plug according to norm:	Cable length [m]
240	50	230	Europe: CEE 7 /XVII	5
230	50-60	230	Europe: CEE 7 /XVII Switzerland: Typ 11	5
120	60	230	North America: NEMA 1-15P	5
110	50-60	230	Europe: CEE 7 /XVII	5
100	50-60	230	Japan: JISC 8308, 8358 7A	5

COMBIFLUX pump FP 314



Type	FP 314 PP-25/19	FP 314 PP-32/25	FP 314 PVDF-25/19	FP 314 S-28/25
Outer tube material	polypropylene		polyvinylidene fluoride	stainless steel
Type of seal	sealless			
Immersion length [mm]	500/700/1.000			
Outer Ø [mm]	25	32	25	28
Connection thread	G1 A*			G ¾ A
Materials in contact with the medium	PP, ETFE, PTFE/carbon, Hastelloy C		PVDF, ETFE, PTFE/carbon, Hastelloy C	Stainless steel (316 Ti), ETFE, PTFE/carbon
Viscosity max. [mPas]	250			
Temperature of medium max. [°C]	45		60	
Weight [kg] at a length of 500/700/1.000 mm	0,3/0,4/0,4	0,3/0,4/0,4	0,3/0,4/0,4	1,0/1,1/1,4

*Hose connections DN 13 and DN 19 included

Performance data and dimensions

Commutator motor FEM 3070 and COMBIFLUX pump FP 314

Commutator motor FEM 3070 with COMBIFLUX pump FP 314

Performance data

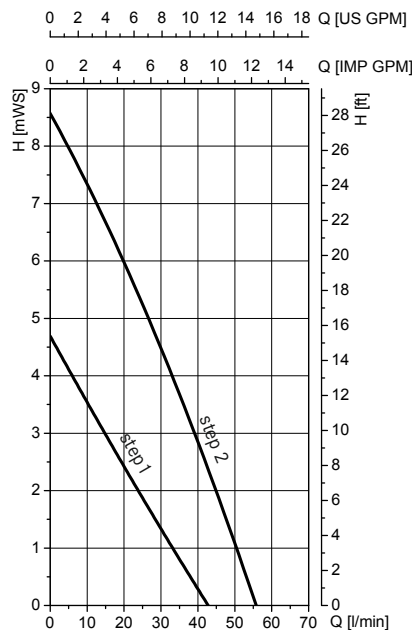
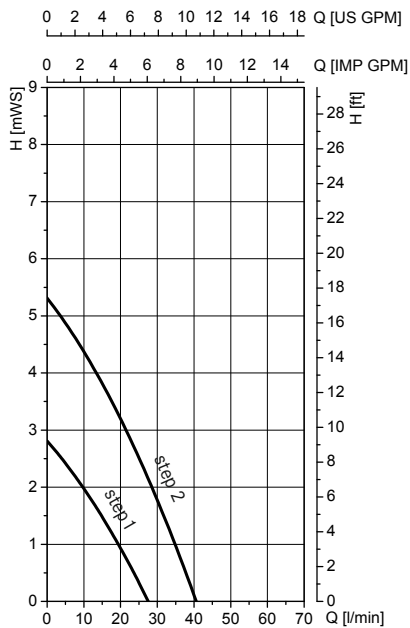
Speed	Delivery rate Q max. [l/min]* at:		Delivery head H max. [mWs]** at:	
	step 1	step 2	step 1	step 2
FP 314 PP-25/19 FP 314 PVDF-25/19	27	40	2,8	5,3
FP 314 PP-32/25 FP 314 S-28/25	44	56	4,7	8,5

Performance charts*

Commutator motor FEM 3070 with COMBIFLUX pump:

FP 314 PP-25/19
FP 314 PVDF-25/19

FP 314 PP-32/25
FP 314 S-28/25

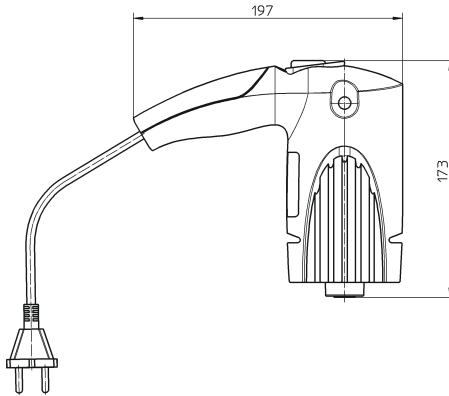


* measured with free outlet, water at 20 °C, values ± 10 %

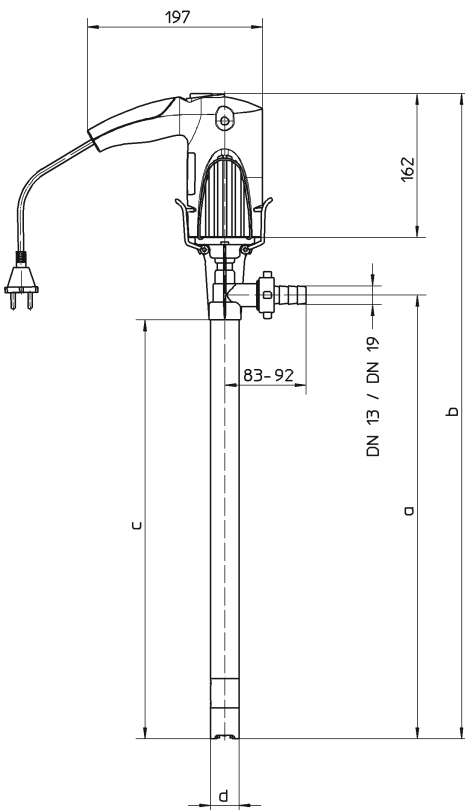
** measured with water at 20 °C

Dimensions [mm]

Commutator motor FEM 3070



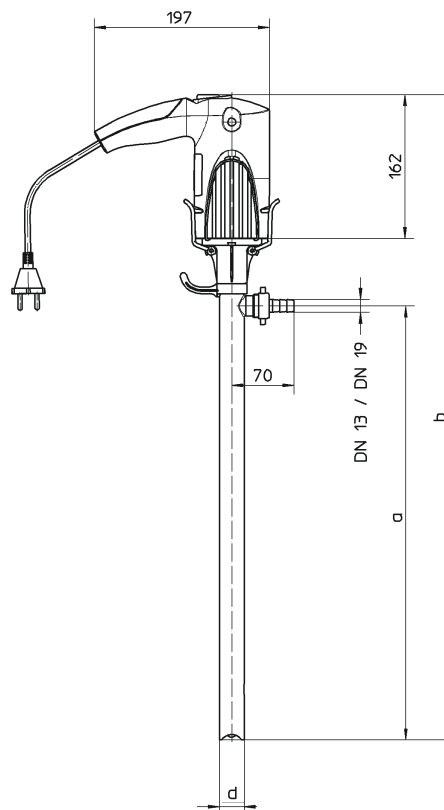
COMBIFLUX FP 314 PP/PVDF
with motor FEM 3070



Immersion length	a	b	c	d	
1.000	1.000	1.227	972	Ø 25	Ø 32*
700	700	927	672		
500	500	727	472		

Dimensions in mm
* Version Ø 32 mm available in PP

COMBIFLUX FP 314 S
with motor FEM 3070



Immersion length	a	b	d
1.000	989	1.227	Ø 28
700	689	927	
500	489	727	

Dimensions in mm

Part numbers

Commutator motor FEM 3070 and COMBIFLUX FP 314

Motor FEM 3070

Description	Part no.
FEM 3070 (240 V, 50 Hz)	307 01 001
FEM 3070 (230 V, 50-60 Hz)	307 01 000
FEM 3070 (230 V, 50-60 Hz) (Swiss version)	307 01 005
FEM 3070 (120 V, 60 Hz)	307 01 002
FEM 3070 (110 V, 50-60 Hz)	307 01 003
FEM 3070 (100 V, 50-60 Hz)	307 01 004

COMBIFLUX pump FP 314

Pump type / Immersion length [mm]	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

Other accessories:

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