

Technical data sheet

Battery motor FBM 4100



Battery motor FBM 4100



Special features:

- ▶ 420 watt brushless power
- ▶ Batch filling function
- ▶ Selectable dry-run protection
- ▶ Energy-efficient and maintenance-free thanks to BLDC motor technology
- ▶ 10-stage speed control
- ▶ LED drum lighting
- ▶ Compatible with drum pumps from other manufacturers
- ▶ Pro version - interface connection for e.g. external start/stop button or connection of peripheral devices such as level gauge, flow meter

| Motor type | Motor bearing | Nominal power [W] | Rotational speed [min ⁻¹] | Rotational speed control | Permissible ambient temperature during operation [°C] | Permissible ambient temperature during storage [°C] | Viscosity max. [mPas] | Protection class (with protective cover) | Weight motor with battery and protective cover [kg] | Weight without battery [kg] |
|------------|---------------|--------------------------|---------------------------------------|--------------------------|---|---|-----------------------|--|---|-----------------------------|
| brushless | ball bearing | 420 W ventilated version | 5.500 - 12.250 | in 10 % increments | 0 to +40 | 0 to +30 | 5.000 | IP24 | 2,8 | 1,6 |
| | | 260 W closed version | | | | | | IP44 | | |

Battery B40-4100



Special features:

- ▶ SEALED: dust and water jet protected according to protection class IP57
- ▶ Integrated short-circuit protection - detects water contact and switches off the electronics
- ▶ PLUS technology: more power with a more compact, lighter design
- ▶ Current charge status via 3-stage LED display
- ▶ Battery management system (BMS) for optimal battery monitoring
- ▶ No memory effect thanks to high-quality Li-ion cells

| Design | Nominal voltage [V] | Nominal capacity [Ah] | Permissible ambient temperature during operation [°C] | Permissible ambient temperature during storage [°C] | Dimensions [mm] L x W x H | Weight [g] |
|--------|---------------------|-----------------------|---|---|---------------------------|------------|
| Li-Ion | 18 | 4 | 0 to +50 | 0 to +30 | 133 x 85 x 55 | 580 |

Charger BCH-4100



Special features:

- ▶ Parallel charging of 2 x 18 V batteries: saves space and ensures fast, high availability and uninterrupted operation
- ▶ Short charging times thanks to fast charging technology
- ▶ Permanent battery monitoring for optimal charging
- ▶ Reactivation of deeply discharged batteries through refresh mode
- ▶ Maximum safety thanks to intelligent charging management

| Nominal voltage [V] | Mains frequency [Hz] | Charging time [min] | Permissible charging temperature range [°C] | Permissible ambient temperature during storage [°C] | Power cord length [m] | Plug type | Dimensions [mm] L x W x H | Weight [g] |
|---------------------|----------------------|---------------------|---|---|-----------------------|-------------|---------------------------|------------|
| 220 - 240 | 50 - 60 | 75 | 0 to +30 | 0 to +40 | 1,5 | CEE 7/16 | 220 x 185 x 70 | 830 |
| 100 - 120 | | | | | | NEMA 1-15 P | | |

Performance data

Battery motor FBM 4100

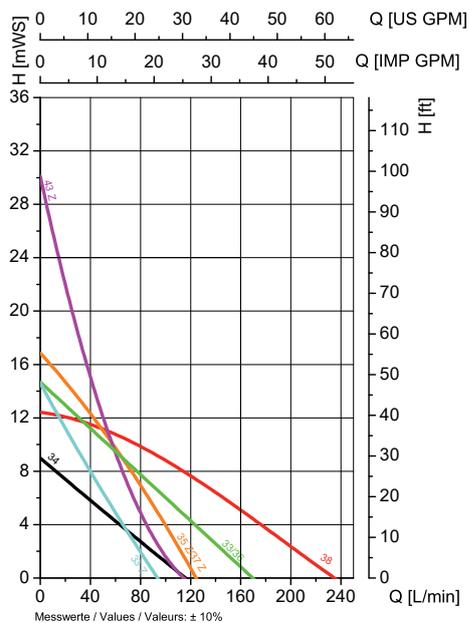


Delivery quantity with one battery charge

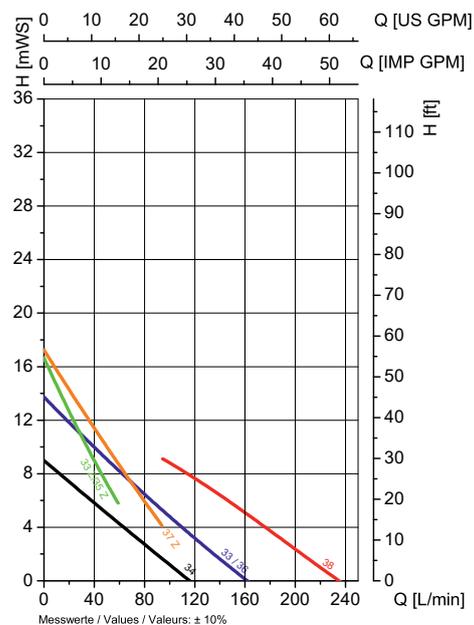
| Configuration | Speed [min ⁻¹] | Total volume [l] | Delivery time Q [l/min] | Time [min] max. |
|---|----------------------------|------------------|-------------------------|-----------------|
| Pump F 430 PP-50/38 (measured directly at the pressure connection) | 100 % = 12.250 | 4.028 | 212 | 19 |
| | 80 % = 10.000 | 5.600 | 175 | 32 |
| | 50 % = 6.250 | 11.000 | 110 | 100 |
| Pump F 430 PP-40/33 2 m hose DN 19 without hand nozzle | 100 % = 12.250 | 1.804 | 82 | 22 |
| | 80 % = 10.000 | 2.244 | 68 | 33 |
| | 50 % = 6.250 | 4.275 | 45 | 95 |
| Pump F 430 PP-40/33 2 m hose DN 19 hand nozzle PP | 100 % = 12.250 | 1.184 | 64 | 18 |
| | 80 % = 10.000 | 1.792 | 56 | 32 |
| | 50 % = 6.250 | 2.970 | 33 | 90 |

Performance chart

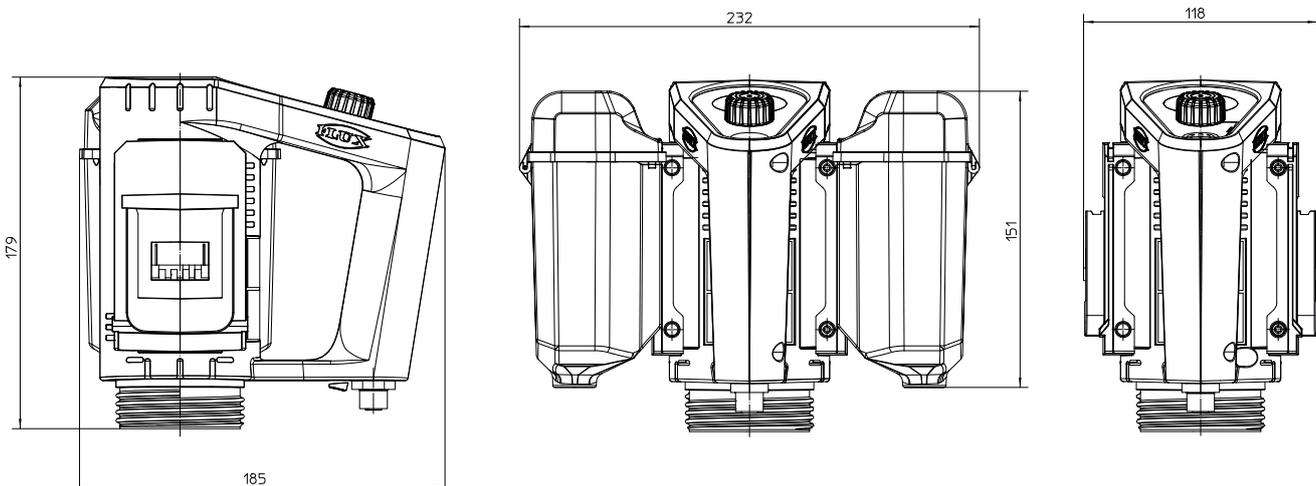
FBM 4100 ventilated
(FBM 4100 Core; FBM 4100 Pro)



FBM 4100 closed
(FBM 4100 Core A; FBM 4100 Pro A)



Dimensions [mm]



Ventilation concepts

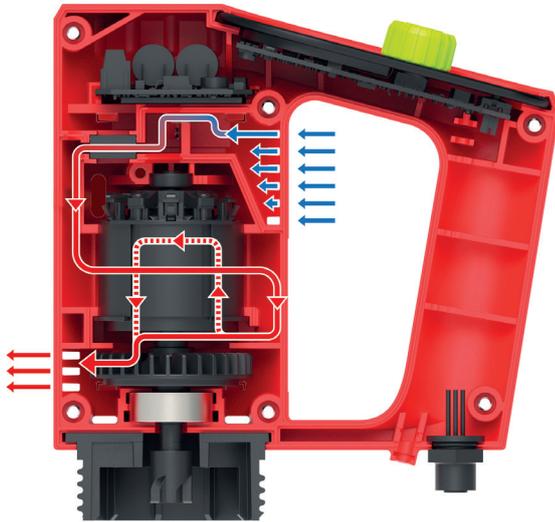
Battery motor FBM 4100



Ventilated versions:

FBM 4100 Core

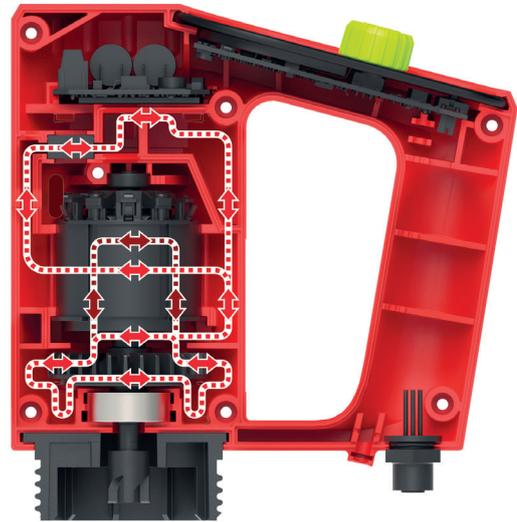
FBM 4100 Pro



Closed versions:

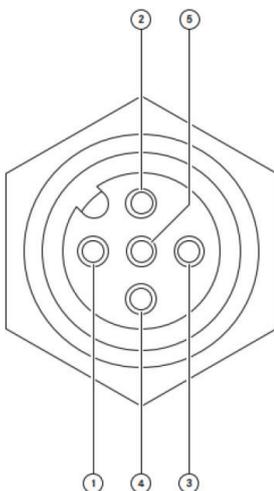
FBM 4100 Core A

FBM 4100 Pro A



FBM 4100 PRO / FBM 4100 PRO A with interface connection

- ① External I/O button
- ② PNP/NPN against GND (PIN 5) and/or against 24 V (PIN 4)
- ③ S1 FLUXTRONIC®
- ④ 24 V supply for external devices (100 mA)
- ⑤ GND



Pro version can be combined with:

- ▶ External start/stop button - e.g. on hand nozzle
- ▶ FLUXTRONIC® evaluation electronics - in conjunction with flow meters
- ▶ Other 24 V peripheral devices such as clip-on flow meters, level meters, or other devices that can be operated with the motor. By outputting NPN or PNP signals, these can start and stop the motor remotely.



Part numbers

Battery motor FBM 4100 and accessories



Battery motor FBM 4100 and accessories

| Motor incl. 2x 18 V, 4 Ah batteries and charger 220-240 V, 50-60 Hz | Part no. |
|---|---------------|
| FBM 4100 Core | 10-401 00 004 |
| FBM 4100 Pro | 10-401 00 005 |
| FBM 4100 Core A | 10-401 00 006 |
| FBM 4100 Pro A | 10-401 00 007 |



| Motor incl. 2x 18 V, 4 Ah batteries – without charger | Part no. |
|---|---------------|
| FBM 4100 Core | 10-401 00 008 |
| FBM 4100 Pro | 10-401 00 009 |
| FBM 4100 Core A | 10-401 00 010 |
| FBM 4100 Pro A | 10-401 00 011 |

| Motor without batteries, without charger | Part no. |
|--|---------------|
| FBM 4100 Core | 10-401 00 001 |
| FBM 4100 Pro | 10-401 00 000 |
| FBM 4100 Core A | 10-401 00 003 |
| FBM 4100 Pro A | 10-401 00 002 |

| Accessories | Part no. |
|---|---------------|
| Battery B40-4100 18 V, 4 Ah SEALED | 10-401 02 003 |
| Charger BCH-4100 220-240 V, 50-60 Hz | 10-401 02 001 |
| Battery protective cover | 10-401 05 014 |
| Adapter for connection to drum pumps from other manufacturers | 10-959 06 284 |

| Connection cable for FBM 4100 Pro/Pro A | Part no. |
|--|---------------|
| for connecting FBM 4100 with flow meter FMC/ FMO; 0,5 m | 10-401 06 015 |
| for connecting FBM 4100 with other peripheral devices; 3 m | 10-401 06 013 |

| Pump kits consisting of FBM 4100 Core incl. 2x 18 V, 4 Ah batteries, charger 220-240 V, compression gland | Part no. |
|---|---------------|
| with F 430 PP-40/33-1000, 2 m PVC hose line, hand nozzle PP | 10-401 40 010 |
| with F 430 PP-40/33-1200, 2 m PVC hose line, hand nozzle PP | 10-401 40 012 |
| with F 430 AL-41/38-1000, 2 m mineral oil hose line, hand nozzle AL | 10-401 10 010 |
| with F 430 AL-41/38-1200, 2 m mineral oil hose line, hand nozzle AL | 10-401 10 012 |