

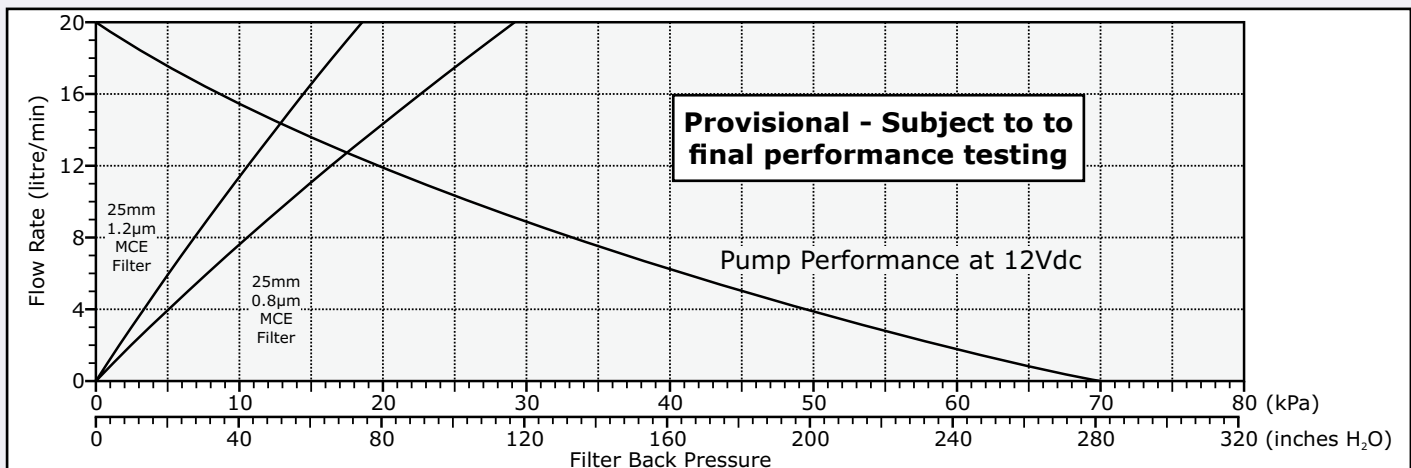
SIKC world leader in sampling technologies

901-2011 Flite 2 High Volume Air Sampling Pump



Specifications

Dimensions.....	178mm W x 115mm H x 206mm D
Weight	2.24 kg (without battery) 3.56 kg (fitted with P901201 3.2Ah battery) 4.84 kg (fitted with P901202 7Ah battery)
Casing IP rating.....	IP20
Flow range	2 - 20 litre/min
Maximum sampler back pressure	70 kPa (280 inches H ₂ O)
Power supply	12V lead/acid battery
Storage / operating temperature	-5 to +50 °C
Charging temperature	-5 to +45 °C
Relative humidity.....	0 to 95 % RH



Flite 2 Pump Features

Battery capacity options	Choose from two capacities of internal battery - 3.2Ah (Part No. P901201), for applications where a lightweight pump is desirable, or 7Ah (Part No. P901202), where longer run times or multiple samples on a single charge are required.
Intelligent Battery Charging	The SKC lead/acid battery charger (Part No. 901-210), provides optimum charging in the minimum possible time. The charger automatically detects when the battery is fully charged and switches to a trickle charging rate to prevent over-charging. Typical charging times for a fully discharged battery are 5 hours for 3.2Ah battery and 10 hours for 7Ah battery.
Flow Fault	Fault shutdown with indication on LCD screen, plus run time display retention, if flow is restricted.
Low Battery	Low battery shutdown with indication on LCD screen, plus run time display retention, in the event of a low battery condition.
Timer Display	LCD screen indicates sample run time in hours, minutes and seconds.
Programmable Run Time	Sample run time programmable in hours and minutes, via keypad and LCD screen.
Programmable Delayed Start Time	Sample start delay time programmable in hours and minutes, via keypad and LCD screen. Start delay countdown display on LCD screen in operation.
Programmable Repeat Runs	Number of sample period repeats programmable via keypad and LCD screen. Indication of sample period repeats on LCD screen in operation.

Getting Started

1) Fitting the Battery

The Flite 2 pump is supplied with the battery not fitted. Refer to the instructions supplied with the battery for details of how to fit the battery into the pump casing.

Note - The toolkit (Part No. P901203) supplied with the pump is required to fit the battery.

2) Charging the Battery

Prior to first use the battery should be fully charged, ideally overnight.

The Flite 2 pump must only be charged using the correct SKC charger (Part No. 901-210).

The charger is supplied with mains input plugs suitable for use in the UK, Europe, USA and Australia/New Zealand. Select the correct the mains input plug and fit it to the charger.

Unscrew the dust cap from the charging/power socket on the pump and connect the output connector from the charger to the pump socket. Screw the charging connector into the socket to prevent it from coming loose during charging.

Plug the charger into the electrical mains supply and switch on the power. The LED indicator on the charger will illuminate amber to indicate that the charger is charging at full rate.

Leave the pump to charge fully, for a fully depleted battery this will take approximately 5 hours for the P901201 3.2Ah battery and approximately 10 hours for the P901202 7Ah battery. When the battery is fully charged the LED indicator on the charger will illuminate green to indicate that the charger has switched to trickle charge.

When fully charged, switch off the mains power to the charger and disconnect the charger output connector from the pump. Always fit the screw-in dust cap to the charging/power socket on the pump after charging.

Battery Care

The Flite 2 pump utilises sealed, valve regulated lead/acid batteries. This type of battery requires no maintenance and when used in accordance with manufacturer's instructions should give a life of approximately 400 charge/discharge cycles (based on 50% depth of discharge). Battery life is affected by a number of factors, but the most significant of these are overcharging and the depth of discharge in use.

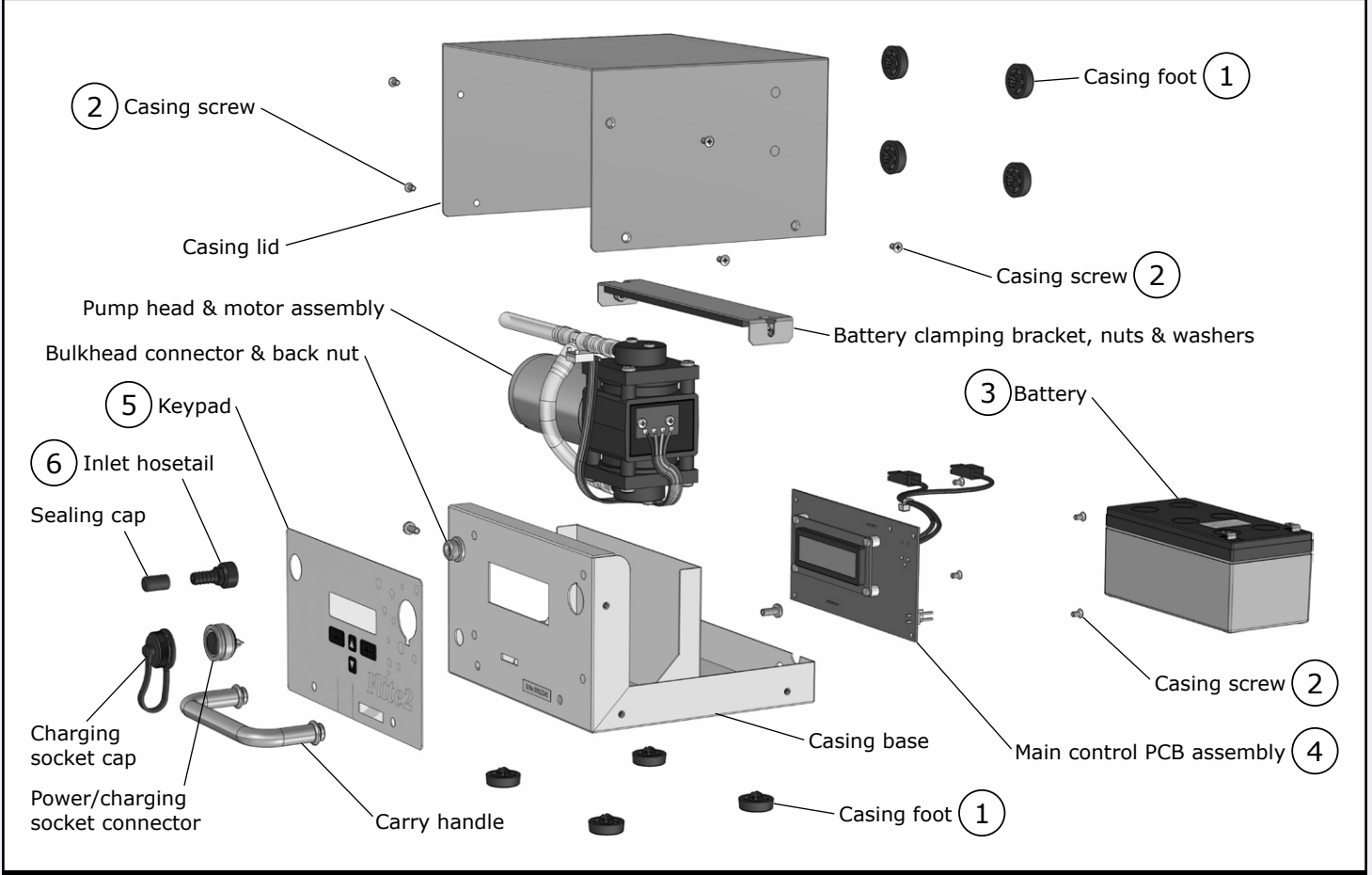
Overcharging of the battery causes overheating and off-gassing of the battery electrolyte which will lead to loss of capacity and reduced service life. The Flite 2 charger (part no. 901-210) is an intelligent charger which automatically detects when the battery is fully charged and switches to a trickle charging rate to prevent overcharging. Always use the correct charger.

A deeper discharge of the battery prior to charging will result in a shorter battery life. This can be as low as 200 charge/discharge cycles if the battery is fully discharged every time prior to charging. If the intended pump usage pattern would fully discharge a P901201 3.2Ah battery between charges, it may be advisable to select the larger P901202 7Ah battery, which for the same usage pattern could have a life of up to 500 charge/discharge cycles.

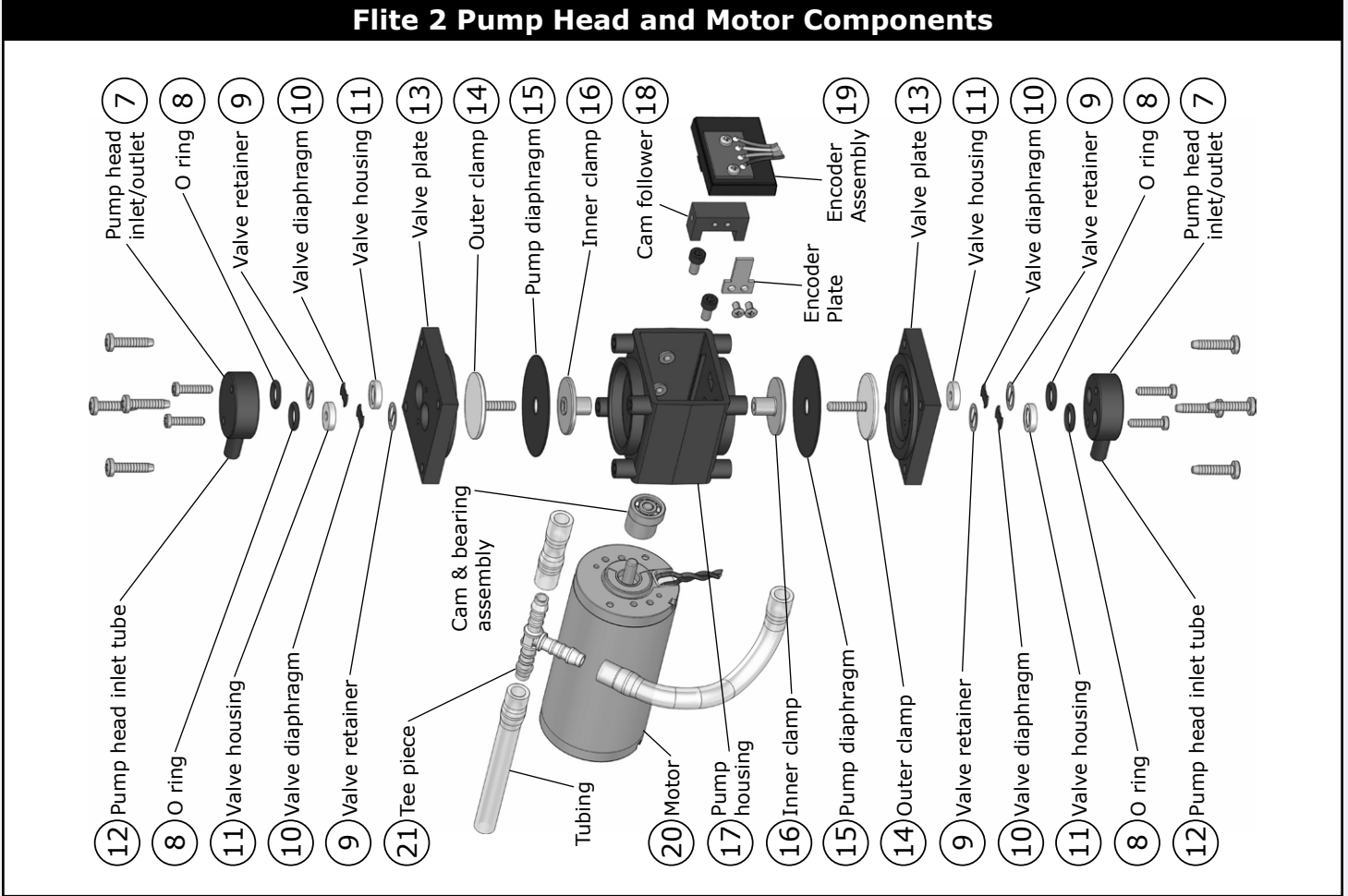
Long term storage - If the pump is to remain unused for a long period of time, SKC recommends that the battery be fully charged prior to storage, and a top up charge be carried out at 6 monthly intervals, or if stored at a temperature in excess of 30°C, at 3 monthly intervals. Failure to do so could lead to significant reduction in battery capacity and life and in extreme cases can prevent the battery from accepting a charge entirely.

Battery Disposal - The EC Battery Directive requires that all lead/acid batteries are disposed of correctly at the end of their working life. This means that they must be collected and treated separately from other waste to ensure that the harmful lead they contain does not enter the environment via landfill sites. Please ensure that any end-of-life SKC batteries are collected and treated correctly.

Flite 2 Pump Components



Flite 2 Pump Head and Motor Components



Flite 2 Pump and Accessories

Part Number	Description
901-2011	Flite 2 high volume sample pump without battery
P901201	Battery 12V 3.2Ah lead/acid
P901202	Battery 12V 7Ah lead/acid
901-210	Battery charger 100-240V ~ 50/60Hz - 12Vdc 1A with UK/EU/US/AUS mains plugs
901-211	Mains adaptor 100-240V ~ 50/60Hz - 12Vdc 2A with UK/EU/US/AUS mains plugs
901-212	Power cable for external battery with crocodile clip connectors
901-213	Rigid aluminium sampling mast - two piece 1 metre high
225-54	'Asbestos' cowed sampling head plastic
225-54A	'Asbestos' cowed sampling head aluminium
TBA	Gridded MCE filters 25mm diameter 1.2 micron pore size (pack of 100)
225-1913	Gridded MCE filters 25mm diameter 0.8 micron pore size (pack of 100)
392-1130	Rotameter 1.0 - 13.0 l/min accuracy $\pm 5\%$ full scale
392-2260	Rotameter 2.0 - 26.0 l/min accuracy $\pm 5\%$ full scale
717-510HA	Defender primary calibrator 0.3 - 30.0 l/min accuracy $\pm 1\%$
391-05	'Calidaptor' flow calibration adaptor for cowed asbestos heads

If the required item is not listed, contact SKC sales on +44 (0) 1258 480188.

SKC provide a wide range of sampling media, including filters, sorbent tubes and impingers. A full selection can be found in the current SKC catalogue and at www.skcltd.com

Flite 2 Pump Replacement Parts

Item	Part No.	Description	Item	Part No.	Description
1	P901111	Casing feet (pack of 4)	12	P901124	Pump head inlet tube (pack of 2)
2	P901110	Casing screws (pack of 4)	13	P901125	Valve plate
3	P901201	Battery 12V 3.2Ah lead/acid	14	P901119	Outer clamp
	P901202	Battery 12V 7Ah lead/acid	15	P901128	Pump diaphragm (pack of 2)
4	P901204	Main control PCB assembly	16	P901120	Inner clamp
5	P901205	Keypad	17	P901122	Pump housing
6	P901108	Inlet hoesetail	18	P901121	Cam follower
7	P901206	Pump head inlet/outlet	19	P901115	Encoder assembly
8	P901126	'O' ring (pack of 4)	20	P901113	Motor
9	P901207	Valve retainer (pack of 4)	21	P901118	Tubing tee
10	P901129	Valve diaphragm (pack of 4)	22	P901203	Tool kit
11	P901116	Valve housing (pack of 4)			

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Note: Table item numbers correspond to the ringed numbers shown in the figures on the previous page.

