ANALYT MESSTECHNIK



OPERATING MANUAL

SKC Sidekick Sample Pump

Safety, charging, flow setting, sampling and low flow sampling with the Sidekick personal air sampling pumps 224-50MH, 224-51MTX and 224-52MTX, a constant flow of 750 to 3000 mL/min, or 5 to 500 mL/min with low flow accessories, with battery care, troubleshooting and ordering information.

AMTC-MN-0044

Rev. 2 · October 2026

About this manual

The SKC Sidekick is a compact, battery-powered personal air sampling pump for dust, gas and vapour sampling. On its own it holds a constant flow from 750 to 3000 mL/min; with a constant pressure controller and a low flow adapter it also samples at 5 to 500 mL/min, through up to four sorbent tubes at once.

Analyt-MTC strongly recommends that you read this manual before using this product, and Safety (p. 5) before you use the pump for the first time: two of the three models are certified for potentially explosive atmospheres, and that certification holds only under the conditions set out there. To start sampling quickly, follow Commissioning (p. 9) and Operation (p. 11) in that order.

Which sampling medium, flow rate and volume to use is set by your sampling method; the SKC *Step-by-Step Guide to Air Sampling* (Part No. 224-G1; ask Analyt-MTC) explains the common set-ups. For service and support, see Service, warranty and contacts (p. 22).

Models covered

Model	Order code	Controls and display	ATEX/UKEX
Sidekick Standard	224-50MH	On/off switch, LED run indicator	No
Sidekick Intermediate	224-51MTX	On/off switch, LED run indicator	Yes
Sidekick Deluxe	224-52MTX	On/off switch, liquid crystal display (LCD) with elapsed time, low battery and flow fault indicators	Yes

Model-specific sections name the model in their heading. Numbers in brackets, such as the flow adjust screw (3), refer to the parts in Figure 1 (p. 7).

Keep this manual for the lifetime of the product. The current revision is on the product page at analyt-mtc.com.

How this manual marks information

⚠ WARNING

A hazardous situation which, if not avoided, could result in death or serious injury.

NOTICE

Practices not related to personal injury — damage to the product, the process or the sample.

Note

Information that helps understanding; never a hazard.

Tip

A shortcut or recommendation; never a hazard.

Document information

Title	SKC Sidekick Sample Pump — Operating manual
Document number	AMTC-MN-0044
Revision	Rev. 2 — October 2026
Applies to	Sidekick pumps 224-50MH, 224-51MTX, 224-52MTX and their kits
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Manufacturer	SKC Inc.

Revision history

Rev.	Date	Change
2	October 2026	Quality programme: new document type, number and identity pages.
1	October 2026	First issue.

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CHAPTER 1

Safety

Read this chapter before you use the pump for the first time. The Sidekick Intermediate (224-51MTX) and Deluxe (224-52MTX) are certified for use in potentially explosive atmospheres; the Sidekick Standard (224-50MH) is not. The rules in this chapter protect that certification, the people working with the pump, or both.

Hazardous areas

The Sidekick MTX pumps, 224-51MTX and 224-52MTX, comply with the EU ATEX Directive 2014/34/EU and with the UK regulations on equipment for potentially explosive atmospheres (UK 2016 No. 1107). They carry the markings and certificates below.

Marking	II 1G · Ex ia IIC T4 Ga
ATEX certificate	SIRA 02ATEX2135
UKEX certificate	CSAE 22UKEX1385
Standards applied	EN IEC 60079-0:2018 and EN 60079-11:2012 (both certificates)
Permitted use	Zones 0, 1 and 2 with flammable gases and vapours; apparatus groups IIA, IIB and IIC; temperature classes T1, T2, T3 and T4
Ambient temperature	−20 to +40 °C

⚠ WARNING

The Sidekick Standard, 224-50MH, is not intrinsically safe. In a hazardous location, it can ignite an explosive atmosphere. Never take the 224-50MH into a hazardous area.

⚠ WARNING

The 224-51MTX and 224-52MTX are certified only for ambient temperatures from −20 to +40 °C. Outside this range, the pump can ignite an explosive atmosphere in a hazardous location. Use the 224-51MTX and 224-52MTX in a hazardous area only at ambient temperatures from −20 to +40 °C.

⚠ WARNING

With the battery eliminator fitted, the pump is no longer ATEX or UKEX certified. In a hazardous location, the pump can then ignite an explosive atmosphere. Never use the pump in a hazardous area with the battery eliminator fitted.

⚠ WARNING

Charging the battery pack in a hazardous location, or with a charger that is not approved, can ignite an explosive atmosphere. Never charge the battery pack in a hazardous area. Charge only with the approved chargers for the Sidekick (see Commissioning (p. 9)).

⚠ WARNING

Damage can affect the pump's intrinsic safety — for example a cracked battery pack enclosure or cracked internal encapsulation that exposes components or cells. In a hazardous location, the pump can then ignite an explosive atmosphere. Do not use a pump with such damage.

Note

Checking that the pump is fit for use in a hazardous area is the user's responsibility. Before first use, have your site manager or the person responsible for explosion protection confirm that the pump's rating meets your site's requirements. Neither the manufacturer nor Analyt-MTC can judge this for your site.

Note

The pump has not been assessed as a safety-related device in the sense of Directive 2014/34/EU, Annex II, clause 1.5, and UK 2016 No. 1107, Schedule 1, clause 22. Do not rely on it to protect people or plant.

UL-certified variants

The Sidekick is also built in a variant range certified for intrinsic safety by UL instead of ATEX and UKEX. These variants must not be used in potentially explosive atmospheres in the European Union or the United Kingdom, where ATEX or UKEX certification is mandatory.

WARNING

Components differ between the UL and the ATEX/UKEX variants, and a part from the other variant can compromise intrinsic safety. In a hazardous location, a pump that is no longer intrinsically safe can ignite the atmosphere. Never swap parts, battery packs included, between the variants; if in doubt, ask Analyt-MTC.

Water, parts and repairs

NOTICE

The case is rated IP20: it is not water- or splash-proof. Water in the case voids the product warranty. Do not use the pump where water can get into it.

NOTICE

Another charger can reduce the battery's performance or damage the pack beyond repair, and voids the battery pack's warranty. Charge the battery pack only with charger 223-203A or 223-113A.

WARNING

A part damaged or wrongly assembled during a repair inside the pump can affect performance and invalidate the ATEX/UKEX certification. In a hazardous location, the pump can then ignite an explosive atmosphere. Have repairs inside the pump done by Analyt-MTC (see What you may service yourself (p. 14)).

CHAPTER 2

Product description

All three Sidekick models share the same pump unit, flow adjustment and battery pack design. They differ in what they show while running and in their certification.

The three models

Model	What it offers
224-50MH Standard	Simple on/off control; LED run indicator; low battery shutdown. Not intrinsically safe.
224-51MTX Intermediate	As the Standard, but intrinsically safe (ATEX, UKEX).
224-52MTX Deluxe	Simple on/off control; LCD showing the elapsed run time and the low battery and flow fault indicators; low battery and flow fault shutdown. Intrinsically safe (ATEX, UKEX).

Every pump comes with its NiMH battery pack, a screwdriver set and this manual. The kits are listed in Pump kits (p. 21).

Parts of the pump

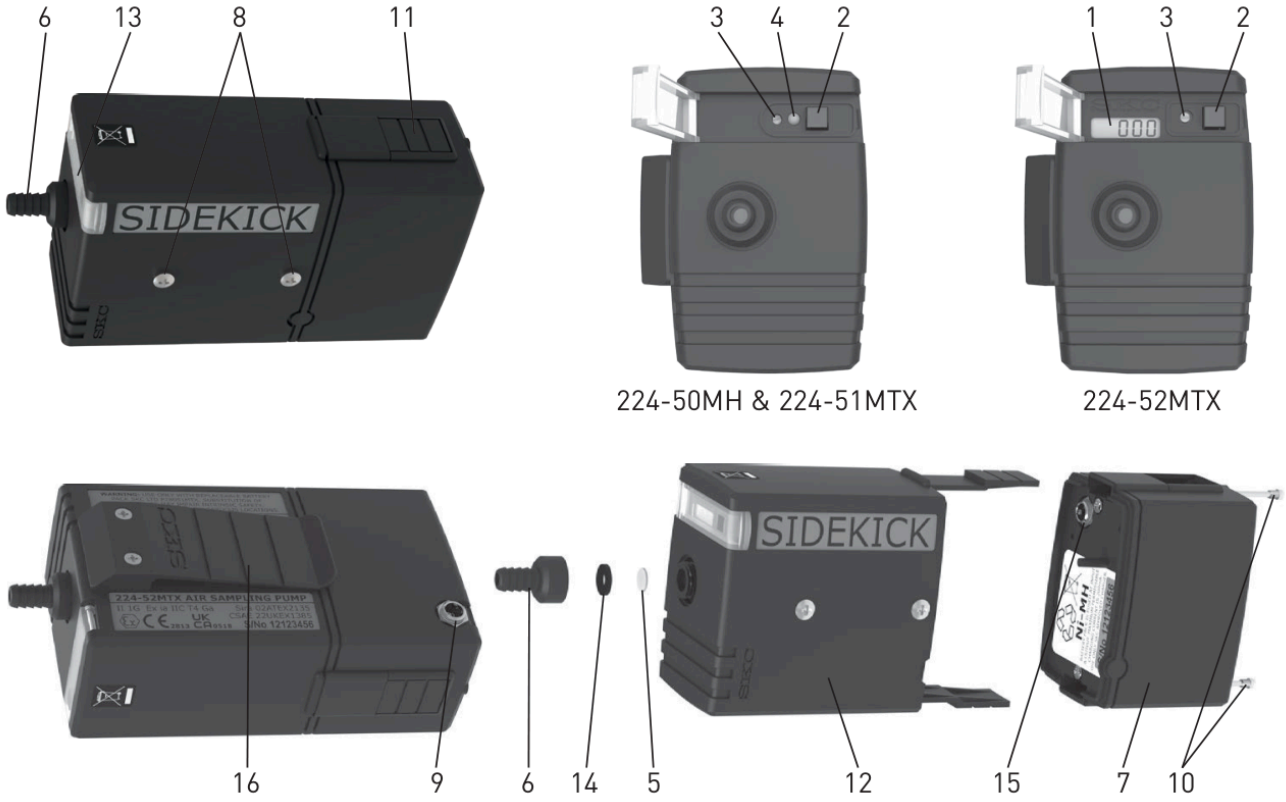


Figure 1. Sidekick pump. Top right: control panel of the 224-50MH and 224-51MTX (left) and of the 224-52MTX (right).
1 LCD screen (224-52MTX) · **2** On/off switch · **3** Flow adjust screw · **4** LED run indicator (224-50MH, 224-51MTX) · **5** Particulate filter · **6** Inlet hose nipple · **7** Battery pack · **8** Accessory mounting screws · **9** Charging socket on the battery pack · **10** Battery pack locking screws · **11** Battery release buttons · **12** Pump unit · **13** Clear snap-down cover · **14** Hose nipple seal · **15** Power output socket on the battery pack · **16** Belt clip

What the pump does for you

- **Constant flow.** The pump holds the set flow within ±5 % while the back pressure of the sampling medium changes, within the limits in Flow and performance (p. 17).
- **Anti-tamper cover.** The controls sit under a clear snap-down cover (13). It is deliberately stiff, so the controls cannot be operated by accident.
- **Particulate filter.** A replaceable filter (5) under the inlet hose nipple stops particles that would otherwise contaminate the pump mechanism.
- **Pulsation dampener.** A built-in dampener smooths the flow.
- **Low battery shutdown.** When the battery runs low, the pump stops itself. This protects the battery pack from deep discharge.
- **Flow fault shutdown (224-52MTX).** If the tubing is blocked or the filter overloaded for more than 15 seconds, the pump stops, then tries to restart up to four times (see When the pump stops by itself (p. 12)).

The LCD screen (224-52MTX)



Figure 2. LCD screen of the 224-52MTX. **1** Flow fault indicator · **2** Low battery indicator · **3** Elapsed run time, in minutes

The display counts the run time in whole minutes. How to read times above 999 minutes is explained in Reading the elapsed run time (p. 12).

CHAPTER 3

Commissioning

The Sidekick runs on a rechargeable NiMH battery pack, 4.8 V, 2.0 Ah. Charge a new pack completely before first use — ideally overnight. It reaches its full capacity after two or three complete charge and discharge cycles.

⚠ WARNING

Charging the battery pack in a hazardous area carries a risk of ignition. With the battery eliminator (see Running from the mains (p. 10)) fitted, the pump's ATEX and UKEX certification is void. In a hazardous location, the pump can then ignite an explosive atmosphere. Never charge the battery pack in a hazardous area, and never use the battery eliminator there.

Chargers

Charge the pack only with one of the two Sidekick chargers. Both work on 100–240 V, 50/60 Hz mains and come with plugs for the UK, Europe, the USA and Australia/New Zealand. They charge at a constant current for 16 hours, then switch to a trickle charge so the pack is not overcharged. Charge at 0 to +40 °C for the best performance.

Charger	Order code
Single charger, one battery pack	223-203A
Five-station charger, up to five battery packs	223-113A

NOTICE

Another charger can reduce the battery's performance or damage the pack beyond repair, and voids the battery pack's warranty. Charge the battery pack only with charger 223-203A or 223-113A.

Charging the battery pack

1. Fit the mains plug for your country to the charger.
2. Plug the charger's output jack into the charging socket at the back of the battery pack (9 in Figure 1 (p. 7)).
3. Plug the charger into the mains and switch on. The charger's LED lights steadily: the pack is charging at the full rate.
4. After 16 hours the charger switches to trickle charge, and its LED flashes on and off.
5. When the pack is fully charged, unplug the jack from the battery pack.

Tip

For the best performance, disconnect the pack from the charger within 24 hours. Battery care: see Looking after the battery pack (p. 14).

Running from the mains

For long sampling periods outside hazardous areas, a battery eliminator powers the pump from the mains. It consists of a mains adapter and a dummy battery pack that you fit in place of the battery pack (see Replacing the battery pack (p. 15)). It works on 230 V, 50 Hz and comes with a European 2-pin mains plug (Part No. 223-300B) or a UK 3-pin mains plug (Part No. 223-300C).

CHAPTER 4

Operation

At flows from 750 to 3000 mL/min the Sidekick needs no accessories: connect the sampling medium to the inlet, set the flow with the flow adjust screw and switch on. For 5 to 500 mL/min, see Low flow sampling (p. 12).

Protecting the pump

NOTICE

Long-term colour-change tubes give off aggressive fumes that can reach and damage the pump mechanism. Impinger liquid can also be drawn into the pump. Always use long-term colour-change tubes in a tandem tube holder with a trap tube. With an impinger, always fit a trap between the impinger and the pump inlet. Set the flow below 1 L/min *before* you connect the trap and impinger. Do not run the pump for long without a sorbent tube or filter in the sampling train.

To hold an impinger bracket steady, fix it to the front of the pump with the accessory mounting screws (8 in Figure 1 (p. 7)). Not following these rules, the IP20 limit and the filter replacement interval (see Replacing the particulate filter (p. 14)) voids the warranty.

Opening the cover and switching on

The on/off switch (2) and the flow adjust screw (3) are under the clear snap-down cover (13). The cover is stiff by design; lift it firmly to reach the controls. Press the on/off switch down to start the pump, and press it again to stop it.

Setting the flow rate

Turn the flow adjust screw (3) with the small flat-blade screwdriver of the supplied screwdriver set: clockwise increases the flow, anticlockwise reduces it. The screw's full span is 12 turns on the 224-50MH and 224-51MTX and 15 turns on the 224-52MTX.

Note
Do not force the flow adjust screw at either end of its span, and keep the screwdriver blade seated firmly in the slot.

Set the flow rate your sampling method requires, using a calibrated flowmeter. This manual does not describe a high-flow procedure; for sampling methods and for how to set and check the flow with the medium in line, see the Step-by-Step Guide to Air Sampling; ask Analyt-MTC for it. To set the flow for low flow sampling, follow Low flow sampling (p. 12).

The pump holds the set flow as long as the back pressure of the sampling train stays within its compensation range (see Flow and performance (p. 17)). As a guide, an IOM sampler with a glass-fibre (GFA) filter at 3 L/min gives about 7 in. H_2O; an IOM sampler with a 0.8 µm mixed cellulose ester (MCE) filter at 2 L/min about 15 in. H_2O.

Running a sample

Press the on/off switch down to start the pump and press it again to stop it. On the 224-50MH and 224-51MTX the LED run indicator (4) flashes while the pump runs. On the 224-52MTX the display

resets to **000** and counts up in minutes; when you stop the pump, the elapsed time stays on the display until the pump is next started. Sampling methods are described in the Step-by-Step Guide to Air Sampling; ask Analyt-MTC for it.

Reading the elapsed run time (224-52MTX)

Up to 999 minutes the display shows the run time directly. Beyond that it alternates between the first two and the last three digits: after 1440 minutes it shows **01**, then **440**. The count goes up to 99 999 minutes, then starts again at **000**. The timer is accurate to ±0.05 %.

When the pump stops by itself

What happened	What you see	What to do
Low battery (224-50MH, 224-51MTX)	The pump has stopped and the LED run indicator no longer flashes.	Charge the battery pack fully. Press the on/off switch twice — off, then on — and the pump works normally.
Low battery (224-52MTX)	The pump has stopped; the display keeps the elapsed time and shows the low battery indicator.	Note the elapsed time. Charge the battery pack fully, then press the on/off switch twice. The display resets to **000**.
Flow fault (224-52MTX)	Blocked tubing or an overloaded filter for more than 15 seconds: the pump stops, then restarts by itself to check whether the fault has cleared. After four restarts with the fault still present, it stops for good; the display keeps the elapsed time and shows the flow fault indicator.	Note the elapsed time. Find and clear the cause (see Troubleshooting (p. 16)), then press the on/off switch twice. The display resets to **000**.

Low flow sampling

For flows from 5 to 500 mL/min — typically through sorbent tubes — the pump runs at a fixed higher flow and works as a source of constant suction. A constant pressure controller (CPC) holds that suction steady, and an adjustable low flow adapter sets the flow through each tube.

What you need

Accessory	Order code
Constant pressure controller (CPC), 20 in. H_2O	224-26-CPC
Adjustable low flow adapter / tube holder for one, two, three or four tubes	224-26-01 to 224-26-04
Protective tube cover to suit the tube size (optional)	224-29A to 224-29D
Calibrated flowmeter, such as a chek-mate flowmeter or a rotameter	see Flowmeters (p. 19)

Each tube position of the low flow adapter has its own throttle valve, so up to four tubes can sample at the same time, each at its own flow rate. The CPC connects to the pump's inlet hose nipple and keeps the suction at the adapter outlet constant, so the flow through the tubes stays stable once you have set it.

Setting up for low flow

1. Start without the CPC and the low flow adapter. Connect the pump's inlet hose nipple directly to a calibrated flowmeter.
2. Switch the pump on and set the flow to about 1.5 L/min (turn the flow adjust screw as described in Setting the flow rate (p. 11)).
3. Switch the pump off and disconnect the flowmeter. Do not adjust the pump flow again.
4. Connect the CPC (1 in Figure 3) to the pump: the short length of tubing on the CPC goes onto the pump's inlet hose nipple. The labelled side of the CPC must face away from the pump.
5. Connect the low flow adapter (2) to the inlet hose nipple of the CPC.
6. Fit the sorbent tube(s) to the adapter. Switch the pump on and set the flow through each tube with its throttle valve, measured with a calibrated flowmeter.

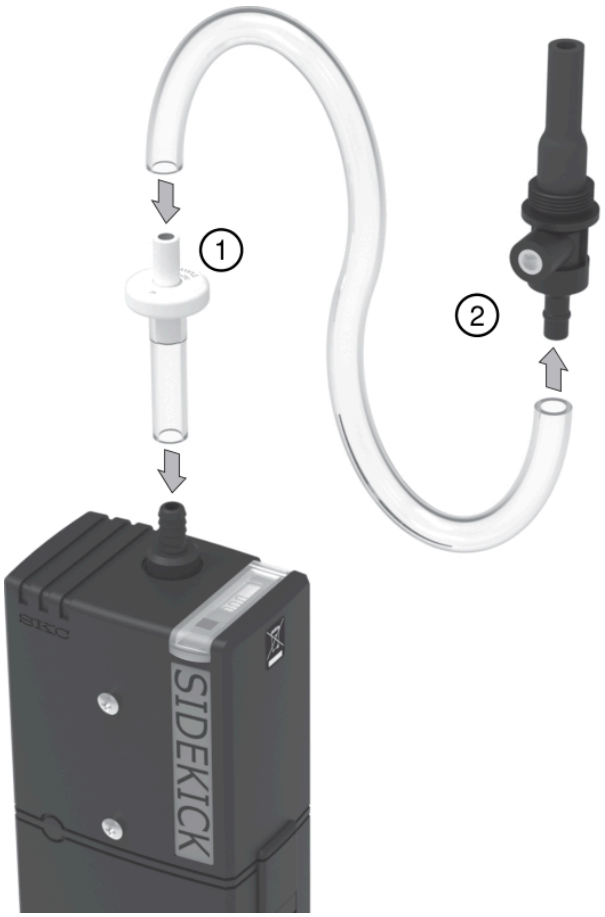


Figure 3. Low flow set-up. **1** Constant pressure controller (CPC), on the pump's inlet hose nipple · **2** Low flow adapter

Note
Before you use the same pump for sampling at 750 to 3000 mL/min again, remove the CPC.

CHAPTER 5

Maintenance

Day-to-day maintenance comes down to two things: a clean particulate filter and a battery pack in good condition. Have the pump serviced at least once a year (see Service interval (p. 22)).

What you may service yourself

You may replace the particulate filter, the inlet hose nipple and its seal, the battery pack, the belt clip and the clear cover. The internal parts listed in Spare parts (p. 20) — valve plates, pump body, yoke and diaphragm, pulsation dampener — sit inside the pump unit.

⚠ WARNING

Taking the pump unit apart and putting it back together needs great care. A part that is damaged or wrongly assembled can affect the pump's performance and invalidate its ATEX/UKEX certification. In a hazardous location, the pump can then ignite an explosive atmosphere. Do not over-tighten the screws. Have work inside the pump unit done by Analyt-MTC.

Replacing the particulate filter

Replace the filter every 2 to 3 months in normal use, or sooner when it looks dirty. A new filter is white; a blocked one turns black. Filters come in packs of 10 (Part No. P40370).

1. Unscrew the inlet hose nipple (6 in Figure 1 (p. 7)) from the pump. The filter (5) sits underneath it.
2. Take out the old filter and put in a new one.
3. Check that the hose nipple seal (14) is in place, and screw the hose nipple back in.

Looking after the battery pack

For the best performance, use the pack at −10 to +45 °C (in a hazardous area, the limits of −20 to +40 °C in Hazardous areas (p. 5) apply) and charge it at 0 to +40 °C.

- **Regular use.** A pack that is only partly discharged each time can lose usable capacity. Once a month, run the pump until it stops on low battery, then charge the pack fully.
- **Long-term storage.** Charge the pack fully, then store it in a cool, dry place at 0 to 30 °C. Recharge it at least once a year — more often if it is stored above 30 °C. After storage, run two or three full discharge and charge cycles to bring it back to full capacity.

Testing a battery pack

1. Connect an approved Sidekick charger to the pack. If the charger's LED lights, the pack's charging input is in order. If it stays dark, the pack's input fuse has blown: replace the pack.
2. Leave the pack on the charger until it is fully charged.
3. Fit the pack and switch the pump on. If the pump does not work at all, the pack's output fuse has blown or its cells have failed: replace the pack.
4. If the pump works but stops on low battery much sooner than it used to, the cells are failing or at the end of their life: replace the pack.

Replacing the battery pack

Use only the battery pack for your model: P78050MH for the 224-50MH, P78051MTX for the 224-51MTX and 224-52MTX. The same steps fit the battery eliminator in place of the pack.

1. Unscrew the two locking screws (10) until they hang freely about 25 mm below the case. The screws are captive and do not come out.
2. Press both battery release buttons (11) inwards and pull the battery pack (7) away from the pump unit (12).

   ⚠ WARNING

   The 224-50MH and the intrinsically safe 224-51MTX and 224-52MTX use different battery packs, and a wrong pack can compromise intrinsic safety. In a hazardous location, a pump that is no longer intrinsically safe can ignite the atmosphere. Fit only the pack listed for your model, and never a pack from a UL-certified Sidekick (see UL-certified variants (p. 6)).
3. Engage the ends of the release buttons in the holes in the top of the new pack, and push the pack home. Check that both release buttons are fully engaged.
4. Tighten the two locking screws — firmly, but without force.
5. Charge a new pack fully before you use it.

CHAPTER 6

Troubleshooting

Problems and remedies

Problem	Possible cause	Remedy
BATTERY AND POWER		
The battery pack does not charge.	Faulty charger.	Try the charger on another battery pack. Replace the charger if needed.
	Faulty battery pack.	Try the pack on a charger known to work. If it still does not charge, replace it (see Testing a battery pack (p. 14)).
The pump does not run.	Faulty battery pack.	Try a battery pack known to work. Replace the pack if needed.
The pump stops on low battery before the end of the sampling period.	The pack was not fully charged.	Always charge the pack fully before a sample.
	The pack is near the end of its life and has lost capacity.	Replace the battery pack.
	The back pressure of the sampling medium is too high.	If your method allows, use a lower flow rate or a less restrictive sampling medium.
FLOW		
The pump cannot reach the required flow rate.	Battery voltage low.	Charge the battery pack fully.
	The back pressure of the sampling medium is too high.	If your method allows, use a lower flow rate or a less restrictive sampling medium.
	The pump valves leak.	The valve plate assemblies need replacing; contact Analyt-MTC (see What you may service yourself (p. 14)).
Repeated flow faults (224-52MTX).	The back pressure of the sampling medium is too high.	If your method allows, use a lower flow rate or a less restrictive sampling medium.
	More than one filter in the sampling head.	Fit only one filter.
	The filter's backing paper was fitted with or instead of the filter.	Fit only the filter.
	The pump's particulate filter is blocked (black).	Replace it (see Replacing the particulate filter (p. 14)).
	Tubing blocked or kinked.	Replace the tubing.

If none of these remedies helps, contact Analyt-MTC (see Service, warranty and contacts (p. 22)).

CHAPTER 7

Specifications

Flow and performance

Flow range	750–3000 mL/min, constant flow 5–500 mL/min with CPC and low flow adapter (constant pressure)
Flow control	±5 % of set point, constant flow
Flow adjustment	Flow adjust screw: 12 turns (224-50MH, 224-51MTX), 15 turns (224-52MTX)
Operating time	Typically 8 h minimum at 3000 mL/min against 15 in. H_2O back pressure

Compensation range: back pressure against which the pump holds the flow

Flow rate	Back pressure
750 mL/min	5–25 in. H_2O
1000 mL/min	0–25 in. H_2O
2000 mL/min	0–25 in. H_2O
3000 mL/min	0–15 in. H_2O

Power

Battery pack	Rechargeable NiMH, 4.8 V, 2.0 Ah: P78050MH (224-50MH), P78051MTX (224-51MTX, 224-52MTX)
Chargers	223-203A single, 223-113A five-station; 100–240 V, 50/60 Hz; 16 h constant-current charge, then trickle charge
Mains operation	Battery eliminator 223-300B or 223-300C, 230 V, 50 Hz (not in hazardous areas)
Protection	Low battery shutdown (all models)

Indication and timer

224-50MH, 224-51MTX	LED run indicator, flashing while the pump runs
224-52MTX	LCD: elapsed run time 0–99 999 min, timer accuracy ±0.05 %; low battery and flow fault indicators; run time kept after a low battery or flow fault shutdown Flow fault shutdown on high back pressure or a pinched tubing (after 15 s; four automatic restarts)

Operating conditions

Temperature	Operating and storage −20 to +40 °C Battery: charging 0 to +40 °C, discharging −10 to +45 °C for best performance; long-term storage 0–30 °C
Humidity	0–95 % RH
Enclosure	IP20 — not water- or splash-proof

Mechanical

Dimensions	145 × 79.5 × 57 mm (H × W × D)
Weight	224-50MH: 465 g 224-51MTX, 224-52MTX: 575 g
Tubing	1/4 in. inside diameter
Case	Clear anti-tamper cover over the controls; belt clip; accessory mounting screws

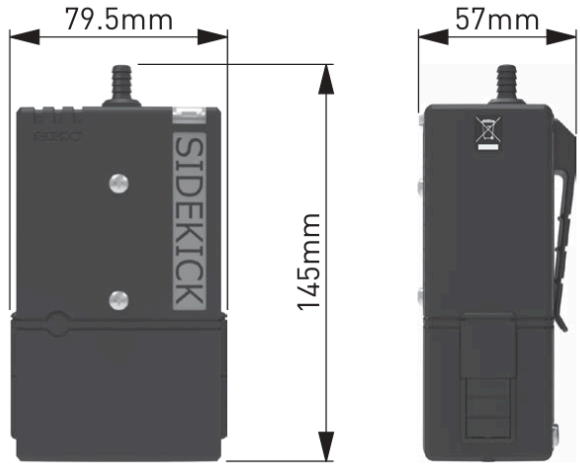


Figure 4. Dimensions, front and side.

Certification

224-51MTX, 224-52MTX	ATEX (Directive 2014/34/EU) and UKEX (UK 2016 No. 1107): II 1G Ex ia IIC T4 Ga; certificates SIRA 02ATEX2135 and CSAE 22UKEX1385; EN IEC 60079-0:2018, EN 60079-11:2012
224-50MH	Not intrinsically safe

The certification applies only under the conditions in Safety (p. 5).

CHAPTER 8

Ordering information

Order from Analyt-MTC with the order codes. For sampling media — filters, sorbent tubes, impingers — ask Analyt-MTC. Use only original Sidekick parts: other parts can put the ATEX/UKEX certification of the 224-51MTX and 224-52MTX at risk.

Charging and power

Description	Order code
Single battery charger, 100–240 V, 50/60 Hz, with UK, EU, US and Australian mains plugs	223-203A
Five-station battery charger, 100–240 V, 50/60 Hz, with UK, EU, US and Australian mains plugs	223-113A
Battery eliminator, 230 V, 50 Hz, European 2-pin mains plug (not for hazardous areas)	223-300B
Battery eliminator, 230 V, 50 Hz, UK 3-pin mains plug (not for hazardous areas)	223-300C

Flowmeters

Description	Order code
chek-mate flowmeter, 20–500 mL/min; accuracy ±1 % of reading (±2.5 % at 20–50 mL/min)	375-00205
chek-mate flowmeter, 0.5–5.0 L/min; accuracy ±1 % of reading (±2.5 % at 0.5–0.75 L/min)	375-0550
Rotameter, 20–250 mL/min; accuracy ±2.5 % of full scale	393-002025
Rotameter, 0.3–3.4 L/min; accuracy ±2.5 % to VDI/VDE 3513-2:2008	393-0334

Dust sampling

Description	Order code
IOM sampler, plastic, with two-part plastic filter cassette and clip	225-70A
IOM sampler, stainless steel, with two-part stainless steel filter cassette and clip	225-76A
IOM sampler, plastic, with two-part stainless steel filter cassette and clip	225-79A
IOM two-part plastic filter cassette with cap and clip	225-71A
IOM two-part stainless steel filter cassette with cap and clip	225-75A
Calidaptor flow calibration adapter for the IOM sampler	391-01
IOM foam plugs for respirable and multi-dust sampling, pack of 10	225-772
IOM foam plugs for respirable and multi-dust sampling, pack of 50	225-772-50
Cyclone sampler, plastic, with plastic cassette for 25 mm filters	225-69
Cyclone sampler, plastic, with plastic cassette for 37 mm filters	225-69-37
Cyclone plastic cassette with clip, for 25 mm filters	225-62
Cyclone plastic cassette with clip, for 37 mm filters	225-62-37
Filter transport cassettes for 25 mm filters, pack of 10	225-67-10

Gas and vapour sampling

Description	Order code
Constant pressure controller (CPC), 20 in. H_2O	224-26-CPC
Adjustable low flow adapter / tube holder, single	224-26-01
Adjustable low flow adapter / tube holder, double	224-26-02
Adjustable low flow adapter / tube holder, triple	224-26-03
Adjustable low flow adapter / tube holder, quadruple	224-26-04
Protective tube cover, type A, for tubes 6 mm diameter × 70 mm	224-29A
Protective tube cover, type B, for tubes 8 mm diameter × 110 mm	224-29B
Protective tube cover, type C, for tubes 10 mm diameter × 150 mm	224-29C
Protective tube cover, type D, for tubes 10 mm diameter × 220 mm	224-29D
Protective cover for low-volume polyurethane foam (PUF) tubes	224-29P
Tube holder for OSHA versatile sampler (OVS) tubes	224-29V
Tube tip breaker	Ask Analyt-MTC

Spare parts

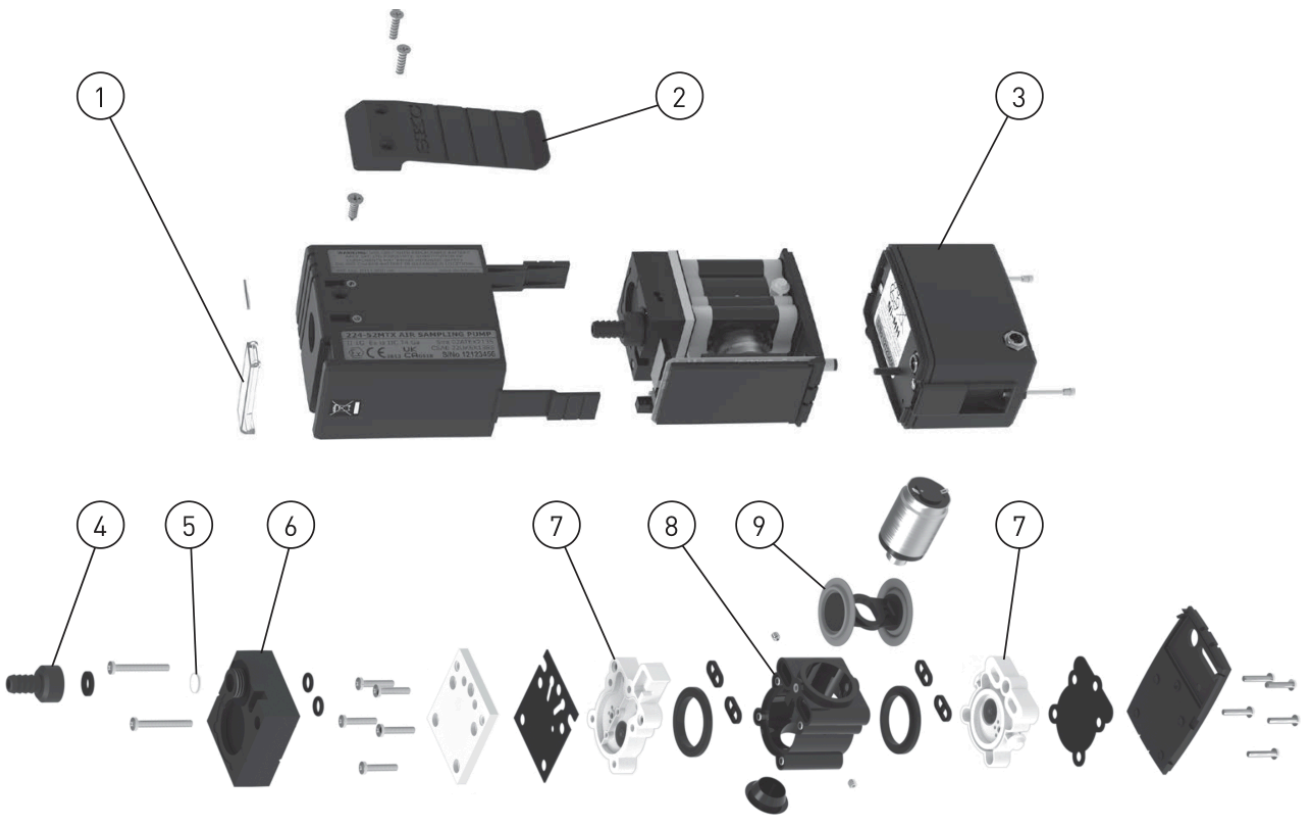


Figure 5. Sidekick components. Item numbers as in the spare parts table.

Item	Description	Order code
1	Clear cover with hinge pin	P20105
2	Belt clip	P20104GY
3	Battery pack, NiMH, 4.8 V, 2.0 Ah, for the 224-50MH	P78050MH
3	Battery pack, NiMH, 4.8 V, 2.0 Ah, for the 224-51MTX and 224-52MTX	P78051MTX
4	Inlet hose nipple with seal	P20106GY
5	Inlet (particulate) filter, pack of 10	P40370
6	Pulsation dampener	P2010802
7	Valve plate assembly, set of 2	P213201
8	Pump body	P22417G
9	Yoke and diaphragm assembly	P2129B

Note
Items 6 to 9 are inside the pump unit. Read What you may service yourself (p. 14) before you replace them. For a part not listed here, ask Analyt-MTC.

Pump kits

Each model is also supplied in kits. The kit number is the pump's part number with a suffix — for example 224-52MTXKP is the Deluxe single-pump dust sampling kit. Every pump in a kit comes with its NiMH battery pack, a screwdriver set and the operating manual.

Suffix	Kit	Contents besides the pump(s)
K	Single pump, basic	Single charger, 1 m Tygon tubing, Step-by-Step Guide, carry case
K5	Five pumps, basic	Five-station charger, 5 × 1 m Tygon tubing, 3 Step-by-Step Guides, carry case
KP / K5P	Dust sampling, one or five pumps	As K / K5, plus per pump an IOM Multidust sampler; 5 IOM Multidust cassettes (15 for five pumps), IOM foams and a Calidaptor
KV / K5V	Vapour sampling, one or five pumps	As K / K5, plus per pump an All-in-One adjustable tube holder and a protective tube cover; a tube breaker
KC / K5C	Combined dust and vapour, one or five pumps	Contents of the dust and the vapour kit together

Kit	Standard, order code	Intermediate, order code	Deluxe, order code
Basic kit, 1 pump	224-50MHK	224-51MTXK	224-52MTXK
Basic kit, 5 pumps	224-50MHK5	224-51MTXK5	224-52MTXK5
Dust kit, 1 pump	224-50MHKP	224-51MTXKP	224-52MTXKP
Dust kit, 5 pumps	224-50MHK5P	224-51MTXK5P	224-52MTXK5P
Vapour kit, 1 pump	224-50MHKV	224-51MTXKV	224-52MTXKV
Vapour kit, 5 pumps	224-50MHK5V	224-51MTXK5V	224-52MTXK5V
Combined kit, 1 pump	224-50MHKC	224-51MTXKC	224-52MTXKC
Combined kit, 5 pumps	224-50MHK5C	224-51MTXK5C	224-52MTXK5C

CHAPTER 9

Service, warranty and contacts

Analyt-MTC is your contact for everything concerning the Sidekick: technical questions, spare parts and accessories, servicing, repairs and warranty claims. Work beyond the user tasks in Maintenance (p. 14) — anything inside the pump unit — is service work; contact Analyt-MTC to arrange it.

Contact

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Before you contact Analyt-MTC

Have the following at hand so that Analyt-MTC can help you quickly:

- the model and serial number from the rating label on the pump;
- the date of purchase and of the last service (see the service record below);
- what happened, the sampling set-up and, on the 224-52MTX, the indicators shown.

Service interval

The manufacturer recommends a service at least once a year: the first one year after purchase, then every year on that date. Whether your pump needs servicing more often depends on how and where it is used — decide this in your own risk assessment.

Service record

Model	
Serial number	
Date of purchase	

Service	Date	Service	Date	Service	Date
1		5		9	
2		6		10	
3		7		11	
4		8		12	

Warranty

Make warranty claims to Analyt-MTC; Analyt-MTC's terms of sale apply. The warranty does not cover damage from not following this manual — in particular:

- ignoring the rules in Protecting the pump (p. 11);
- using the pump where water can get into the case (the case is rated IP20);
- not replacing the particulate filter every 2 to 3 months, or when it looks dirty (see Replacing the particulate filter (p. 14));
- charging the battery pack with a charger other than the approved Sidekick chargers.

Disposal

The pump carries the crossed-out wheelie-bin symbol: at the end of its life it falls under the waste electrical and electronic equipment (WEEE) rules and must not go into household waste. Remove the battery pack first. Battery packs — the one supplied and any spares — fall under the battery regulations and must be collected and recycled separately from other waste. Dispose of both as your national regulations require; Analyt-MTC can advise you.

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