

Portable Gas Conditioning System TGAK 3



The Bühler Model TGAK 3 is a complete, portable gas conditioning system in a rugged metal case.

The basic model consists of a gas cooler with condensate vessel, a gas pump, filter, moisture detector and a flow meter with needle valve. A version without the pump is also available.

The TGAK features a unique fail-safe interlock which inhibits the operation of the sample pump until the cooler has reached its operational temperature of 5°C. Additional features include a moisture sensor which also inhibits sample pump operation in the event moisture is detected downstream of the cooler. The sample then passes through a fine particulate filter to ensure analyzer cleanliness

All wetted parts are available in a variety of materials for corrosive, non-corrosive and reactive applications.

Condensate removal is accomplished with either a condensate vessel, a manual drain valve or an integrated peristaltic pump.

Additional options or design variations are available upon request. Please contact one of our application specialists for further information

- Outlet dew point and alarm threshold adjustable
- Improved cooling capacity

Technical Data

Ambient temperature	+5..40°C ¹⁾	Cooling capacity (at 25°C)	90 kJ/h
Outlet dew point	adjustable, 2...20°C	Power supply	230 V, 50Hz or 115 V, 60Hz
Alarm threshold	adjustable, -3...-1K and +1...+7K with respect to the dew point	Power connection	2.5m cable with connector
Dew point stability statically over whole range	0.1K ±1.5K	Power consumption	max. 250 VA
Inlet dew point max	60°C ¹⁾	Ready for operation after	max. 10 min.
Inlet gas temperature	110°C ¹⁾ (180°C ¹⁾ *)	Dimensions (without pipe)(HxWxD)	appr. 510x355x270
Gas flow standard version	appr. 10..max.110 l/h ¹⁾	Weight of standard version	appr. 16 kg
acid-resistant version	appr. 10..max.110 l/h ¹⁾	Condensate draining	manual valve
Gas terminals	quick coupling*	Condensate vessel	quick coupling
Rel. pressure max.	0 bar	Peristaltic pump	
CSP4xxxx only	1 bar		

¹⁾ Under restriction of the available cooling power. See the PKE 521 data sheet for specifications. You may as well use our gas cooler selection programme or simply call us.

* 180°C inlet gas temperature only with CSP5XX00 version. Gas inlet then with bulkhead union.

Materials in Gas Path

Standard filter element	Glass, PPH, Viton, EPDM, stainless steel, PA 12, PC glass fibre
Acid-resistant materials filter element	PVDF, glass, teflon, stainless steel, PTFE, Kalrez sintered PTFE

Please indicate with order

Portable gas conditioning system

The part number consists of a code for the available options.
Tick in desired code at x marked positions.

Part no.	Description																														
CSP <table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td>x</td><td>x</td><td>x</td></tr> <tr><td>1</td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td></tr> <tr><td>5</td><td></td><td></td></tr> <tr><td></td><td>1</td><td></td></tr> <tr><td></td><td>2</td><td></td></tr> <tr><td></td><td></td><td>1</td></tr> <tr><td></td><td></td><td>2</td></tr> </table> 00	x	x	x	1			2			3			4			5				1			2				1			2	TGAK 3
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	Standard version																														
	Acid-resistant materials																														
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	Without pump																														
	180°C inlet gas temp. ; acid-resistant materials																														
	Supply 115 V																														
	Supply 230 V																														
	Condensate vessel with cock for manual draining																														
	Peristaltic condensate pump included																														
00	Without further options																														



case trolley

Example: portable gas conditioning system TGAK 3 (=CSP), higher resistive materials (=2), supply 230V (=2) with condensate vessel (=1) gives part number CSP 2 2 1 00

Accessories

Part no.	Description	Material	Package
CS PX 00012	Removable case trolley with 50mm wheels	Aluminium	1 pcs.

Spare Parts

Part no.	Description	Material	Package
41 15 00 10	Filter element for CSP1xx00 and CSP4xx00	Fibre glas	5 pcs.
41 15 10 50	Filter element for CSP2xx00	PTFE	8 pcs.
91 24 030027	Spare tube (90° connection) for peristaltic pump	Norprene	1 pc.