CEM Accessories

Heated Gas Sampling Probe (PSG Plus)	Features • Largest active filter surface on the market • Corrosion resistant made of stainless steel SS316Ti • Controlled or self-regulated heating to 180°C • No cold spots • Comfortable filter change without tools • Double stage back purging as option • Test gas connection as standard • Protective housing for outdoor installation • Temperature Alarm contact • 8-holes flange for variable mounting • Upgradeable as option	Functions This heated gas sampling probe can be equipped with an ultimate effective double stage back purge with tubing of 12mm outer diameter which is unique on the market
Heated Gas Sampling Probe (PSG Basic)	Features • Largest active filter surface on the market • Corrosion resistant made of stainless steel SS316Ti • Very Compact Design • Controlled or self-regulated heating to 180°C • No cold spots • Filter change without tools • Test gas connection as standard • Protective housing for outdoor installation • Temperature alarm contact • Upgradeable as option	Functions This heated gas sampling probe can be used for applications with up to 3g/m ³ dust concentration. A surface coated ceramic filter with 0.3µm porosity is available as option. They enable troublefree representative sampling of hot predominantly dust and water vapor loaded gases.
Heated Gas Sampling Probe (PSG Plus DSBP)	Features • Largest active filter surface on the market • Dual stage back purging with 10mm passage • Corrosion resistant made of stainless steel SS316Ti • Controlled heating to 180°C • No cold spots • Comfortable filter change without tools • Test gas connection as standard • Protective housing for outdoor installation • Temperature alarm contact • 8-holes flange for variable mounting	Functions This heated gas sampling probe is without condensation of water vapour and therefore wihout blocking of the filter. This type of sampling probe is equipped with an ultimate effective double stage back purge with 10mm passage which is unique on the market. The membrane coated ceramic filter with 0.3µm porosity is supporting additionally the great back purge effectivity.
Sample Gas Compressor Cooler	 Features High performance compressor cooler 1 gas path High performance heat exchanger Long-lasting hot-gas bypass system without switching the compressor Corrosion resistant easy to change PTFE/PVDF, stainless steel or glass heat exchanger Very compact design Digital display for temperature and alarm Alarm contact Integrated condensate pump optionally Wall mounting or portable housing 	Functions The cooling system is filled with FCKW-free refrigerant R134a. As heat exchanger materials PVDF, glass or stainless steel are available. The sample gas cooler is equipped with a digital display for temperature monitoring and with a potential-free alarm contact.

Sample Gas Compressor Cooler	 Features High performance compressor cooler 1-2 gas paths High performance heat exchanger Long-lasting hot gas bypass system without switch the compressor Corrosion resistant easy to change PTFE/PVDF, stainless steel or glass heat exchanger Compact design Digital display for temperature and alarm Integrated condensate pumps 	Functions The cooling system is filled with FCKW-free refrigerant R134a. As heat-exchanger materials PVDF, glass or stainless steel are available. The sample gas cooler is equipped with a digital display for temperature monitoring and with a potential-free alarm contact.
Sample Gas Compressor Cooler	 Features High performance compressor cooler 1-4 gas paths High performance heat exchangers Long-lasting hot gas bypass system without switching the compressor Corrosion resistant easy to change PTFE / PVDF, stainless steel or glass heat exchanger Digital display for temperature and alarm Alarm contact Integrated condensate pumps 	Functions The cooling system is filled with FCKW-free refrigerant R134a. As heat-exchanger materials PVDF, glass or stainless steel are available. The sample gas cooler is equipped with a digital display for temperature monitoring and with a potential-free alarm contact.
Sample Gas Compressor Cooler	 Features High performance compressor cooler 1-8 gas paths High performance heat exchangers Long-lasting hot gas bypass system without switching the compressor Corrosion resistant easy to change PTFE / PVDF, stainless steel or glass heat exchanger Digital display for temperature and alarm Alarm contact Integrated condensate pumps 	Functions The cooling system is filled with FCKW-free refrigerant R134a. As heat-exchanger materials PVDF, glass or stainless steel are available. The sample gas cooler is equipped with a digital display for temperature monitoring and with a potential-free alarm contact.
Sample Gas Compressor Cooler	 Features Hiigh performance compressor cooler For Atex-zone 1 and 2 II 2G Ex pxb de [ia] IIC T4 Gb High performance heat exchangers Long lasting hot gas bypass system without switching the compressor Corrosion resistant easy to change PTFE/PCDF, stainless steel or glass heat exchanger Analog temperature indication 	Functions A cooling system is filled with CFC-free refrigerant R134a. As heat-exchanger materials PVDF, glass or stainless steel are availbel. The sample gas cooler is equipped with an analog indication for temperature monitoring and with a potential-free alarm contact.
Sample Gas Compressor Cooler	 Features Hiigh performance compressor cooler Portable or wall mounting housing Integrated filter, flow meter, liquid sensor and sample pump High performance heat exchangers Long lasting hot gas bypass system without switching the compressor Corrosion resistant easy to change PTFE/PCDF, stainless steel or glass heat exchanger 	Functions The cooling system is filled with FCKW-free refrigerant R134a. As heat-exchanger materials PVDF, glass or stainless steel are available. The sample gas cooler is equipped with a digital display for temperature monitoring and with a potential-free alarm contact.

Sample Gas Compressor Cooler	 Features High performance compressor cooler 1-4 gas paths High performance heat exchangers Long lasting hot gas bypass system without switching the compressor Corrosion resistant easy to change PTFE/PVDF, stainless steel or glass heat exchanger Tendency or digital display for temperature and alarm Alarm contact 	Functions The cooling system is filled with FCKW-free refrigerant R134a. As heat-exchanger materials PVDF, glass or stainless steel are available. The sample gas cooler is equipped with a digital display for temperature monitoring and with a potential-free alarm contact.
Compact Gas	Features	Functions
Conditioning	 High performance compressor cooler Long lasting hot-gas bypass system without switching the compressor Corrosion resistant PTFE / PVDF heat exchanger Very compact design 1-4 gas path Integrable filters, flow meters, flow alarms, liquid sensors, gas pumps, preseparators and acid dosing Modular upgradeable and application dependently configurable Digital display for temperature, alarms, logbook, operating hours counter and service interval configurable 	An electronic system controls dew point and cooling air tempera- ture. Potential free alarm contact allow remote monitoring of the device.
Compact Gas	Features	Functions
Conditioning - Peltier	High performance peltier-cooler with two long lasting peltier-	An electronic system controls dew point and cooling air tempera-
	 elements Precise outlet dew point even at significant load variations Corrosion resistant PTFE / PVDF heat exchanger Very compact design 1-2 gas paths Digital display for temperature, alarms, logbook, operating hours counter and service interval indication Modular upgradeable and application dependently configurable Integrable filters, flow meters, flow alarms, liquid sensors, gas pumps, preseparators und acid dosing pump 	ture. Potential free alarm contacts allow remote monitoring of the device. Operating parameters are stored for diagnosis in a log.
Compact Gas	Features	Functions
Conditioning - Twister	 Negligible wash out of water soluble gas compenents due to Twister technology High performance compressor cooler Long lasting hot-gas bypass system without switching compressor Very compact design Digital display for temperature, alarms, logbook, operating hours counter and service interval indication Modular upgradeable and application dependently configurable Integrable filters, flow meters, flow alarms, liquid sensors, gas pump, preseparator und dosing pump 	An electronic system controls dew point and cooling air tempera- ture. Potential free alarm contact allow remote monitoring of the device.

Condensate Guard	 Features Protection against condensate breakthrough Detection of smallest amounts of liquid Monitoring of 1-2 gas path Voltage 24V DC, 115V AC, 230V AC Easy installation and integration Features Feed / alerting liquid sensor 	Description / Function The condensate guard protects downstream analyzers against humidity. It monitors up to two gaspaths and reliably signals a condensate breakthrough in case of failure of cooling devices or failure of condensate drains, thus avoiding costly downstime and high repair costs. Description / Function The electronic control is used for supply and signal processing of
+ = A A 2 12 11 14 A A 2 12 11 14 A A 3 12 11 14 A A 5 11	 Feed / alerting light barrier at flow meter Potemtial-free switch-contact for alerting, switching off the sample gas pump or switching a shut off valve Adjustable switch-point 	liquid sensor MS and light barrier at flow meter FM. The electron- ic control is equipped with a potential free directional contact. The switch point of the electronic of the elctronic control unit can be adjusted with a potentiometer.
Flowmeter	Features • Dosage of aggressive gaseous media • With fine adjustment valve • High chemical resistance • Optional light barrier • Optional electronic control	Description / Function The highly corrosion-resistant flowmeter with needle valve is used for flow control of aggressive gas media. It consist of a flared top glass tube in which a float can mobe freely up and down.
Sample Gas Pump	Features • Uncontaminated flow • Chemically resistant, maintenance-free • Optimized PTFE-membrane • IP20-housing with on/off switch • Voltage 230V 50Hz, 115 60Hz • Easy mounting and intergation • External and internal installation • Can operate in any installaed position	Description / Function The sampling pump is used frequently in the fields of chemistry industry and environmental technology for sampling gases out of the ambient environmental or for exhaust gas and smoke analysis. This pump ensures an easy installation intodevices and equipment as well as an adaption to a variety of processes.
Sample Gas Pump	Features • Uncontaminated flow • Chemically resistant, maintenance-free • Optimized PTFE-membrane • Compact design, low weight • Voltage 230V 50Hz, 115V 60Hz • Easy mounting and integration • For internal installation • Can operate in any installed position	Description / function The sampling pump is used frequently in the fields of chemistry industry and environmental technology for sampling gases out of the ambient environmental or for exhaust gas and smoke analysis. This pump ensures an easy installation intodevices and equipment as well as an adaption to a variety of processes.

Sample Gas Pump	Features • Uncontaminated flow • For highly aggressive and corrosive gases • Wear-resistant, maintenance-free • Optimized PTFE-membrane • Enclosed IP54-housing • Voltage 230V 50Hz • Easy mounting and integration • Can operate in any installed position	Description / Function Is a reliable diaphragm pump specifically designed for highly aggressive and corrosive gases. It is equipped with an particularly resistant and gas-tight PVDF-pump-head and a Teflon-coated membrane. Special valves ensure a high tolerance to vapor and condensate. The core of the pumpis an elastic membrane which is moved up and down in its center by an eccentric. The pump operates absolutely oil-free. This ensures an uncontaminated transport, evacuation or compression of gases.
Preseparator	 Features Separation of condensate Pre-cooling to ambient temperature for water vapour inlet dew points >65°C Improved performance of sample gas cooler Suitable for high temperatures Condensate removal with peristaltic pump SR25 PVDF-hose fittings and mounting bracket Corrosion resistant made of glass Low wash out ratio 	Description / Function The pre-separator is designed specifically for gas analysis technolo- gy to relief sample gas coolers at high inlet temperatures up to 160°C and high water vapour inlet dew points above 65°C
Sample Gas Pump	Features • Uncontaminated flow • Chemically resistance, maintenance-free • Flow adjustment (230V- Version) • Enclosed IP54-housing • Low pulsation, quiet operation • EPDM-or FKM-membrane/valves • Voltage 230V 50Hz, 115V 60Hz • Easy mounting and integration • External and internal Installation	Description / Function It is a robust vibrating armature diaphragm pump, which was developed specifically for the pumping of sample gas. Alternat- ing current in electrical coils reverse the magnetici field induced around a magnetized rod at a rate determined by the supplied frequency. The pump operate absolutely oil free. The vibrating armature principle works without motor, motor shaft and bearing.
Moisture Sensor	Features • Protection against condensate breakthrough • Detection of smallest amounts of liquid • Line break monitoring • High chemical resistance • Optional electronic control	Description / Function The moisture sensor protects downstream analyzers against humidity. This monitoring device reliably signals a condensate breakthrough in case of failure of cooling devices or failure of condensate drains, thus avoiding costly downtime and high repair costs. The moisture sensor operates according to the principle of electric conductivity. Its design ensures that any condensate in the sample gas flow gets directly to the sensor surface by gravitational force.

Peristaltic Pump	Features • Self-suctioning • Synchronous motor • Return Stop • High chmical resistance • Wide range of performance and application • Very compact design • Low speed • Long-lasting pump hose	Description / Function The peristaltic pump is designed specifically for analysis technolo- gy applications for metering fluid media. Application include: • Reliable continuous condensate drainage • Metered addition of acids and alkalis
Teflon Depth Filter	Features • Reliable filtration of solid particles • Optic check of filtercartridge condition • Quick filtercartridge exchange • Small dead space • Can operate in any installed position	Description / Function In gas analytic systems occuring solid contaminants, especial- ly fine particles up to 0.1 micron, are reliably filtrated by this teflon depth filter. the large filter surface of ca. $67m^2$ of the cylindrical filtercartridge ensures a reliable micro-filtration and a long service life with low pressure drop. The contamina- tion level of the filter can be visually checked through the large porthole.

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