Pumps & compressors for fuel cell applications

APPLICATION BROCHURE

TÜV SÜD ISO 9001

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Fuel cell schematics

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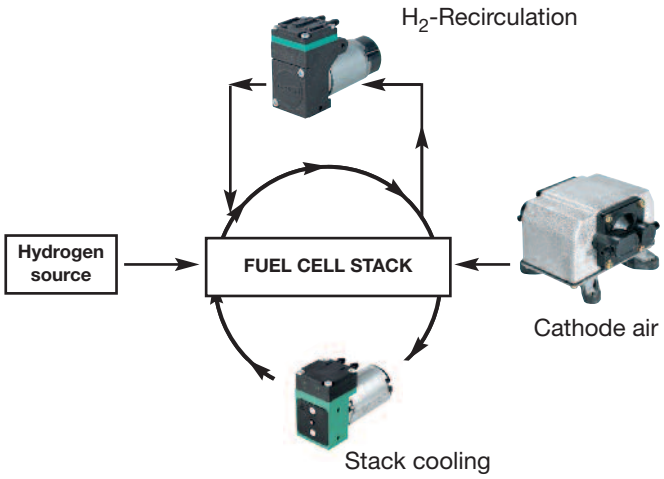
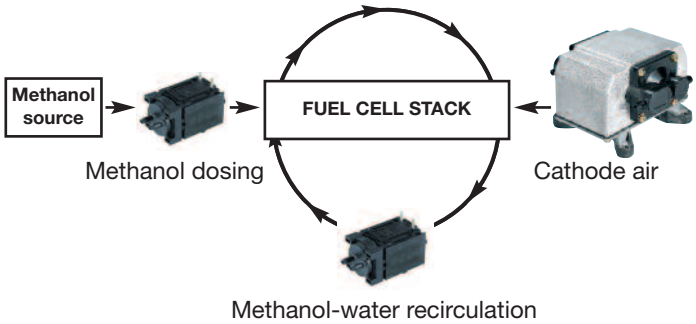
Portable fuel cell systems

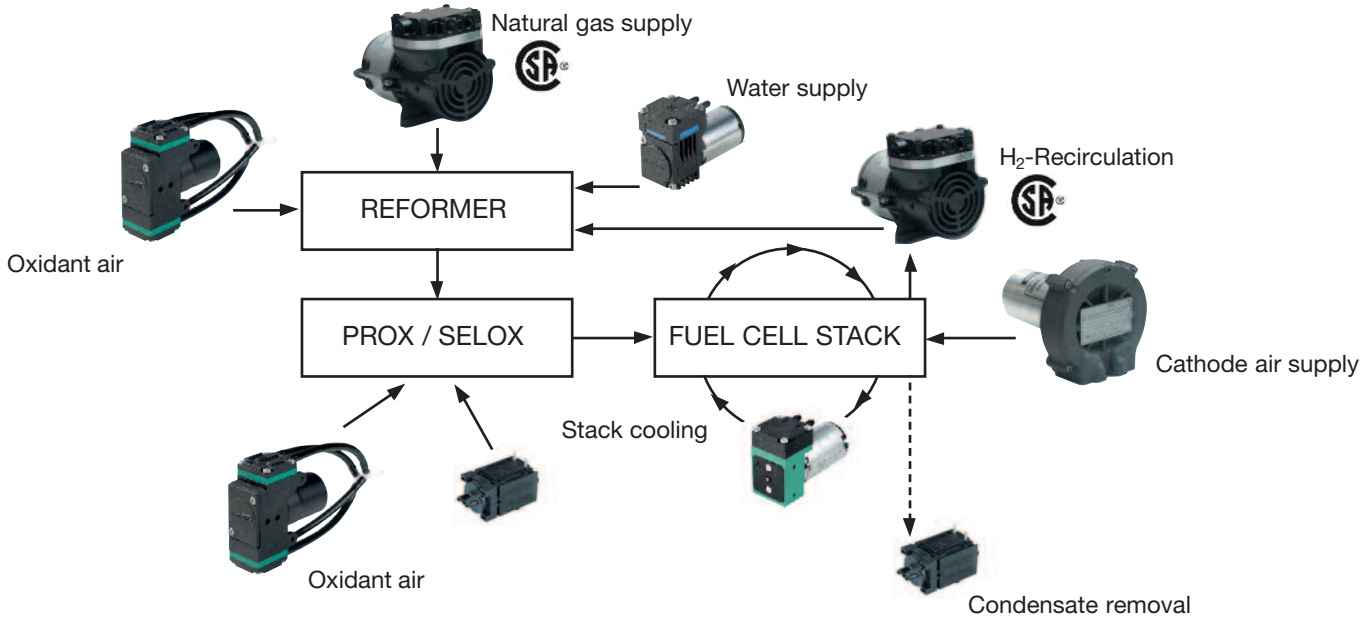
Polymer-electrolyte membrane fuel cell (PEMFC)



Direct methanol fuel cell (DMFC)



Stationary/residential fuel cell systems (PEMFC)



Recommended products and features

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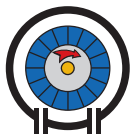
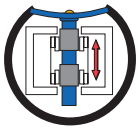
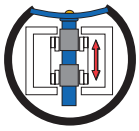
Application	Pump examples		Features	Product range Flow	Pressure	Technology
Hydrogen Natural gas	118 ZC		Oil-free High efficiency Dry-running Tight to outside CSA approved products available	0-55 lpm 0-1,9 CFM	0-1,5 bar 0-21,8 PSI	DIAPHRAGM
Air supply	SGP 2BH100		Oil-free High efficiency Non-contact Long life	0-30 m³/h 0-17,6 CFM	0-0,2 bar 0-2,9 PSI	SIDE CHANNEL 
Air supply	G 09		Oil-free High efficiency Dry-running Low vibration Nearly pulsation-free	0-200 lpm 0-7,1 CFM	0-1,6 bar 0-23,2 PSI	ROTARY VANE
Air supply	SMG YP DU	 	Oil-free High efficiency Dry-running Long life	0-300 lpm 0-10,6 CFM	0-0,7 bar 0-10,2 PSI	LINEAR 
Air supply Water supply	1420 BLDC 5002F	 	Oil-free High efficiency Dry-running Tight to outside Self-priming	0-90 lpm 0-3,2 CFM 0-2,2 lpm 0-0,08 CFM	0-2,8 bar 0-41 PSI 0-5 bar 0-72,5 PSI	DIAPHRAGM
Stack cooling	5002F 1210	 	Oil-free High efficiency Dry-running Tight to outside Self-priming	0-1,1 lpm 0-0,04 CFM	0-3 bar 0-43,5 PSI	DIAPHRAGM
Methanol dosing Methanol-water recirculation	SMF		Oil-free High efficiency Dry-running Self-priming Long life	0-260 ml/min	0-0,5 bar 0-7,3 PSI	LINEAR 

As **Thomas Division** we are committed to **fuel cell technology** and we **know how** vital custom air compressors and liquid pumps are to your fuel cell and fuel reformer applications.

We offer the broadest range of oil-free positive displacement and blower technologies all designed for long life and best reliability at maximum efficiency.

Working successfully with the Fuel Cell Industry for many years, we look forward to serving you with the optimum product solution.

So, what can we do for you?

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