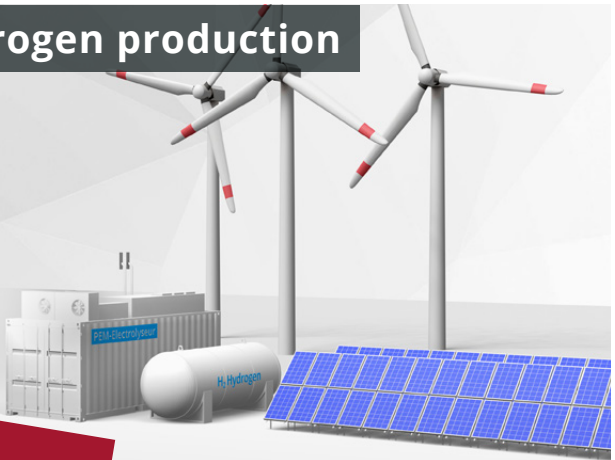


Hydrogen production



Competence and solutions for
self-acting control valves

PRESSURE CONTROL | LEVEL CONTROL | SERVICE

Hydrogen – Energy sources of the future

Hydrogen is a flexible and easily transportable energy carrier. In addition, it is climate-friendly when produced with renewable energies.

The electrochemical process of electrolysis is employed for using hydrogen as an electricity storage medium. In two partial reactions, electrolysis dissociates water into its components hydrogen and oxygen with the help of electrical current. The hydrogen is then stored in tanks in compressed condition (power-to-gas) and, if required, converted back into electricity in a fuel cell that reverses the process of electrolysis

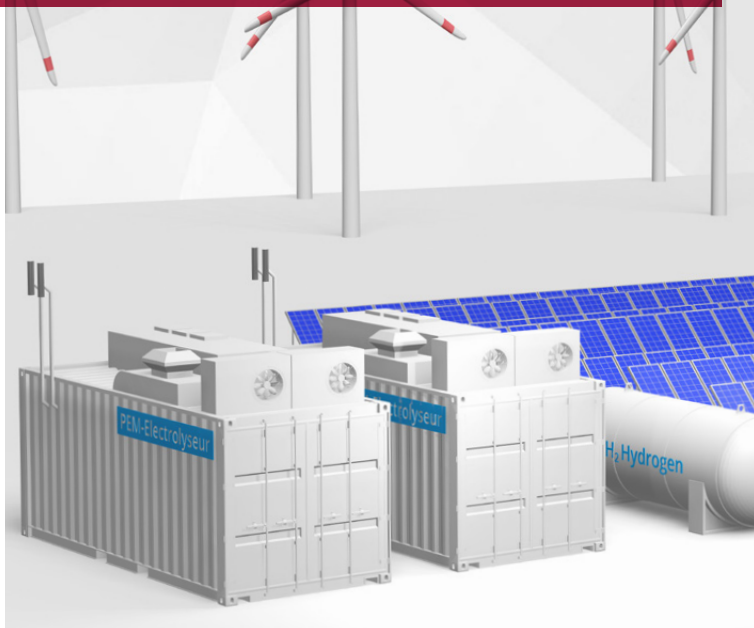
Requirements

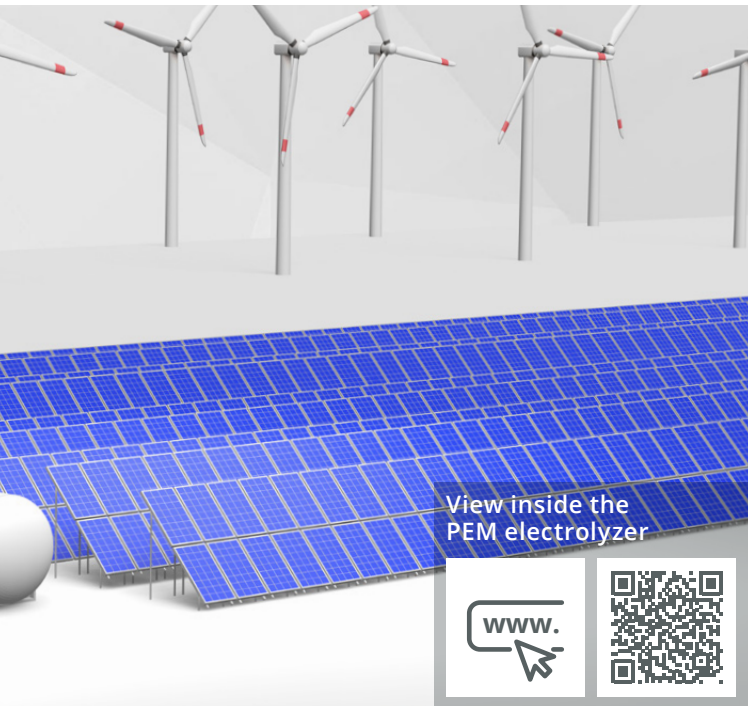
- » Compact design
- » High-quality materials such as stainless steel (1.4404)
- » Corrosion-resistant
- » ATEX-compliant according to product directive 2014/34/EU
- » Least failure probability (MTBF)
- » Ultra-pure water

Electrolyzers



Hydrogen production using renewable energies and electrolyzers





View inside the
PEM electrolyzer



Products for degassing

Continuous bleeding valve with DVGW approval
for small to high flow rates

EB 1.12 ATEX H2

Liquids up to 130 °C | soft or metallic seal | completely made of stainless steel | standard design with a BSP male connection G 3/4 on the outlet | DVGW certificate | ATEX version optional

DN	25 - 100
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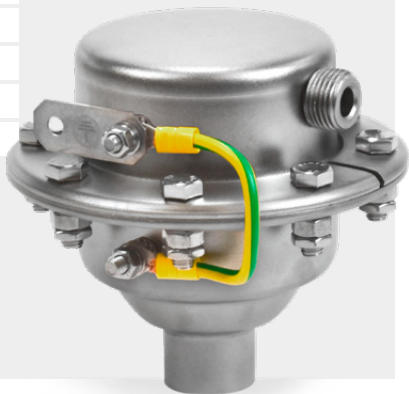
G	1/2 - 2
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PN	16
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p	0 - 16 bar
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Q	248 Nm ³ /h
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T	130 °C
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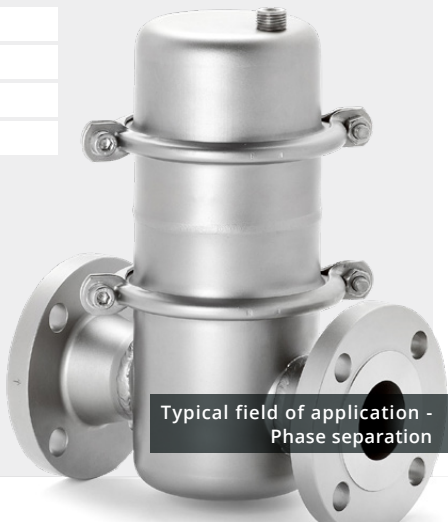
Typical field of application -
Degassing of the anode circuit

Gas separator with integrated bleeding and venting valve

AS 5

Liquids up to 130 °C | completely made of stainless steel | integrated soft sealed bleeding valve

DN	50
PN	16
p	0 - 16 bar
T	130 °C



Typical field of application -
Phase separation

Products for drainage

Valve for small flow rates

KA 2 ATEX H2

Steam , compressed air and cold condensate up to 130 °C | soft seal | completely made of stainless steel | standard design up to DN 20 with a BSP male connection G 1/2 on the outlet, DN 25 male connection BSP G 3/4 | ATEX

DN	25 x 3/4A
G	1/2 x 1/2A, 3/4 x 1/2A, 1 x 3/4A
PN	16
p	0 - 12 bar
Q	1,570 l/h
T	130 °C



Typical field of application -
Heat exchanger



Liquid separator with integrated trap

AS 2

Liquids, gases and steam up to 190 °C | completely made of stainless steel | integrated soft sealed liquid trap

DN 15 - 50

G 1/2 - 2

PN 16

p 0 - 13 bar

Q max. 1,200 l/h

T 190 °C



Typical field of application -
H₂ drying

Products for mechanical pressure control

Valve for small flow rates

DM 505 ATEX H2

Liquids, gases and steam up to 130 °C | single-seated, non-balanced | soft seal | diaphragm controlled | completely made of stainless steel | ATEX

DN	15 - 25
G	1/2
PN	250
p_1	up to 250 bar
p_2	0,005 - 20 bar
K_{vs}	0,05 - 1,4 m ³ /h
T	130 °C



Typical field of application -
Backfeed of process water



High pressure valve for small to medium flow rates

UV 8.2

Liquids, gases up to 130 °C, steam up to 400 °C | single-seated, non-balanced | soft or metallic seal | diaphragm, piston or bellows-controlled | NACE-compatible | ATEX version optional

DN	15 - 50
G	3/8 - 2
PN	100
p_1	2 - 100 bar
K_{VS}	0,2 - 5,5 m ³ /h
T	130 °C / 400 °C



Typical field of application -
Hydrogen transfer station



**Please send us your enquiry
and allow us to advise you.**

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