

The Seitz HyValve Range



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The HyValve products have been developed for the dispensing of hydrogen. They are designed according to the highest quality and safety standards. Pressure ranges up to 1000 bar are possible.

Due to the compact design of the valves and the elimination of control air lines as in pneumatic systems, you can

save space, investment and maintenance costs of your refueling system application.

Combined with optimal flow rate and fast filling, our HyValve range will convince you by its high availability due to the broad temperature range, high repeatability, utmost safety and exceptional reliability.

Our Technology

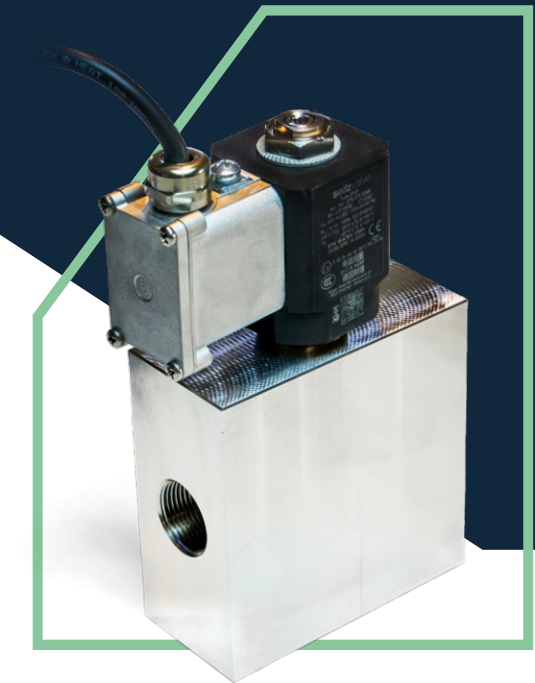
- Compact design
- Extended temperature range
- Electromagnetic actuation
- Optimal flow rate
- Operates in all mounting positions
- Sturdy construction
- Lower maintenance costs
- Exceptional reliability

Your Benefits

- Minimal footprint
- Maximum availability of the HRS
- Lower investment and operating costs
- Faster fueling
- Flexibility
- Longer lifespan
- High economic efficiency
- Maximum safety



HyValve 500, Type 3108 A



HyValve 500, Type 3109 A-3/4

HyValve 500

Type 3108 or 3109

Technical data	
Medium	Hydrogen
Function	2/2-way solenoid valve, NC
Pressure range (PN)	1 ... 50 MPa 10 ... 500 bar 145 ... 7'250 psi
Test pressure (PT)	75 MPa 750 bar 10'878 psi
Burst pressure (DIN EN 12516-3)	> 200 MPa > 2'000 bar > 29'007 psi
Design Pressure (PS)	10 ... 550 bar (145 ... 7'970 psi)
Orifice size	DN 8 DN 15
Material	Stainless steel (1.4404 or 1.4435)
Mounting	Any position
Ambient temperature	-40°C ... +85°C
Media temperature	-40°C ... +85°C
Rated voltage	24 V AC/DC or 230 V AC
IP-Code	IP 65/67
EC-type-examination	Solenoid coil 2F86: EPS 18 ATEX 1098 X IECEX EPS 18.0055 X Nepsi GYJ 18.1429 X © II 2G Ex mb IIC 150°C (T3) ... (T4) Gb

HyValve 1000

Type 3105 or 3106

Technical data		
Medium	Hydrogen	
Function	2/2-way solenoid valve, NC	
Pressure range (PN)	DN 0.5 0 ... 100 MPa 0 ... 1'000 bar 0 ... 14'500 psi	DN 6 1 ... 100 MPa 10 ... 1'000 bar 145 ... 14'500 psi
Test pressure (PT)	150 MPa 1'500 bar 21'755 psi	
Burst pressure (DIN EN 12516-3)	> 300 MPa > 3'000 bar > 43'511 psi	
Design Pressure (PS)	DN 0.5 0 ... 1'050 bar 0 ... 15'228 psi	DN 6 10 ... 1'050 bar 145 ... 15'228 psi
Orifice size	DN 0.5 DN 6	
Material	Stainless steel (1.4404 or 1.4435)	
Mounting	Any position	
Ambient temperature	-50°C ... +85°C	
Media temperature	-50°C ... +85°C	
Rated voltage	24 V AC/DC or 230 V AC	
IP-Code	IP 65/67	
EC-type-examination	Solenoid coil 2F86: EPS 18 ATEX 1098 X IECEX EPS 18.0055 X Nepsi GYJ 18.1429 X © II 2G Ex mb IIC 150°C (T3) ... (T4) Gb	



HyValve 1000, Type 3106



HyValve 1000, Type 3105

Order information

HyValve 1000

Type	Orifice Size	Tube Size	Flow Rate	Voltage	Material**	Item Number
3106	DN 6	3/8" (9.53)	Kv = 0.663 m³/h Cv = 0.766 US-gal/min	24 V AC/DC 230 V AC	1.4404 1.4404	800.819.00 800.820.00
3106 B	DN 6	9/16" (14.29)	Kv = 0.663 m³/h Cv = 0.766 US-gal/min	24 V AC/DC 24 V AC/DC 230 V AC 230 V AC	1.4404 1.4435 1.4404 1.4435	800.839.00 800.852.00 800.840.00 800.853.00
3105	DN 0.5	1/4" (6.35)	Kv = 0.009 m³/h Cv = 0.010 US-gal/min	24 V AC/DC 230 V AC	1.4404 1.4404	800.817.00 800.818.00

HyValve 500

Type	Orifice Size	Tube Size	Flow Rate	Voltage	Material **	Item Number
3108 A	DN 8	9/16" (14.29)	Kv = 1.15 m³/h Cv = 1.33 US-gal/min	24 V AC/DC 24 V AC/DC 230 V AC	1.4404 1.4435 1.4404	800.835.00 800.850.00 800.836.00
3108 G	DN 8	G 3/8" (16.66)	Kv = 1.15 m³/h Cv = 1.33 US-gal/min	24 V AC/DC 230 V AC	1.4404 1.4404	800.841.00 800.842.00
3109 A-3/4	DN 15	3/4" (19.05)	Kv = 3.577 m³/h Cv = 4.38 US-gal/min	24 V AC/DC 230 V AC	1.4435 1.4435	800.856.00 800.857.00
3109 A-1	DN 15	1" (25.40)	Kv = 3.88 m³/h Cv = 4.486 US-gal/m	24 V AC/DC 230 V AC	1.4435 1.4435	800.854.00 800.855.00

Solenoid coil

Type	Temperature Range	Rated Power	Voltage	Item Number
2F86	-50°C ... +85°C (T3)* -50°C ... +85°C (T3)*	16 W*** 16 W***	24 V AC/DC ± 15% 230 V AC ± 15%	275.275.024B 275.275.230B

CheckValve (on demand)

Type	Orifice Size	Tube Size	Item Number
In development	DN 6	3/8" (9.53)	288.212.00
In development	DN 8	9/16" (14.29)	287.562.00

* T4: -50°C ≤ Tamb ≤ +65°C

** Pressure retaining housing is made of listed material

*** Duty cycle 100% over full temperature range

For detailed dimensional drawing or 3-D model, please contact us.

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Our policy is one of continued research and development. We therefore reserve the right to amend, without notice, the specification given in this document.

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