

Vtek Controls™

SERIES SSG In-Line Sanitary Sight Glasses



- Sizes: 1/2" – 6"
- Connections: clamp, weld, flange, or thread — fast retrofits or new builds
- Temperature Range: -20°C to 130°C (-4°F to 266°F)
- CE, ATEX, 3-A, FDA-compliant materials (UL available on request)



Reliable Flow Visibility for Liquid-Cooled Data Centers

See exactly what's flowing through your process—without compromising it.

Liquid cooling is now essential to managing the heat loads of high-density AI and HPC racks — and every closed loop depends on flow that operators can actually see. The Vtek SSG Series straight-through sight glass and its lighted variants give engineers a clear, real-time read on coolant flow, so low flow, air entrainment, sediment, or a developing leak gets caught before it becomes downtime.

Engineered around the flow path. The glass bore and end connections are matched to your line size — no step, no dead leg, nowhere for fluid to collect, even in horizontal runs. The result is minimal pressure drop in high-flow, low-energy cooling systems, and no stagnation point to trap contaminants in a closed loop.

Visibility by design. A dual-window design maximizes the viewing area for an unobstructed read at a glance. Integrated LED options — DC24V, rechargeable lithium, or ATEX explosion-proof — keep coolant clearly visible in dim mechanical rooms and dense piping racks. Install vertically or horizontally.

Built to run continuously. Tempered glass paired with 316L stainless steel connections stands up to standard data-center coolants — water, ethylene/propylene glycol mixtures, and compatible dielectric fluids. An integral metal stop sets correct o-ring compression and isolates the glass from pipe torque, protecting your most vulnerable component from installation stress. Where impact is a risk, a polycarbonate shield or perforated viewing tube adds insurance. A low-Ra electropolished wetted surface resists fouling and keeps loops clean with minimal maintenance.

Applications

- Liquid cooling: direct-to-chip, immersion, and rear-door heat exchangers — CDUs, manifolds, and server loops
- Chilled water & glycol: primary/secondary loops, chillers, pumps, condenser water
- Facility & critical infrastructure: process cooling, HVAC, hyperscale, colocation, and semiconductor fabs

Complete your liquid cooling infrastructure with Vtek Controls high-performance butterfly valves, triple-offset valves, pneumatic/electric actuators, and failsafe options — all optimized for reliable, low-maintenance operation in CDUs, manifolds, and server loop.



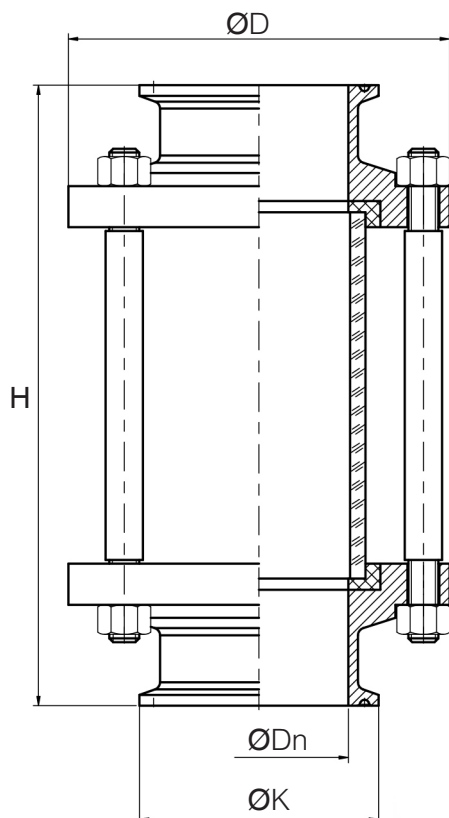
Technical

- Sizes: 1/2" – 6"
 - Connections: clamp, weld, flange, or thread — fast retrofits or new builds
 - Lighting: DC24V LED, rechargeable battery, ATEX explosion-proof
 - Certifications: CE, ATEX, 3-A, FDA-compliant materials (UL available on request)
 - Design Simple split-body structure with fewer parts, easy to disassemble and clean
 - Full Bore design allows for near zero pressure drop
 - Borosilcate Glass provides High thermal-shock and chemical resistance
 - AISI 304 / AISI 316L Wetted Metal
 - High Precision Polished Finish (FDA Compliant)
 - O-ring Material- EPDM (ethylene propylene diene monomer) FDA Compliant, FFKM (perfluoroelastomer)
 - Temperature Range: -20°C to 130°C (-4°F to 266°F)
 - Pressure Range: Full Vacuum to 10 bar (145 psi)
 - Warranty: 12 Months from delivery (excluding wearable parts like glass and O-rings)
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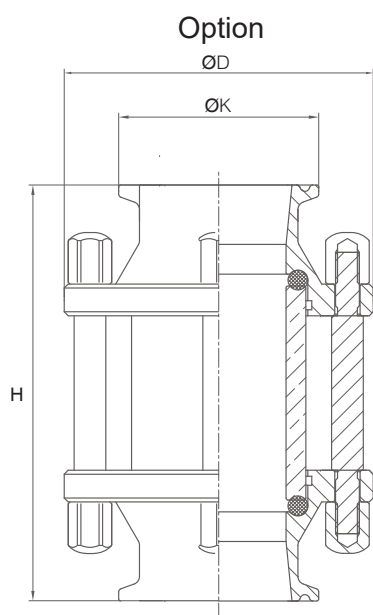


Dimensions

Series -SSG-ZT

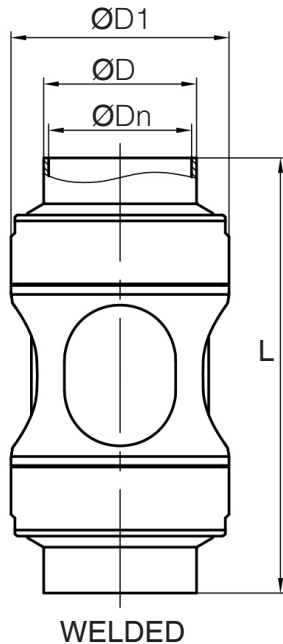


Size	Dn	K	H	D
1/2"	0.37	0.98	6.06	3.07
3/4"	0.62	0.98	6.06	3.07
1"	0.88	1.99	6.06	3.07
1-1/4"	1.13	1.99	6.06	3.07
1-1/2"	1.38	1.99	6.22	3.39
2"	1.88	2.52	6.46	4.02
2-1/2"	2.34	3.05	6.61	4.53
3"	2.84	3.58	6.77	4.88
3-1/2"	3.35	4.17	6.77	5.47
4"	3.84	4.69	7.56	6.06
5"	4.84	5.69	8.27	7.28
6"	5.78	6.58	9.21	8.47



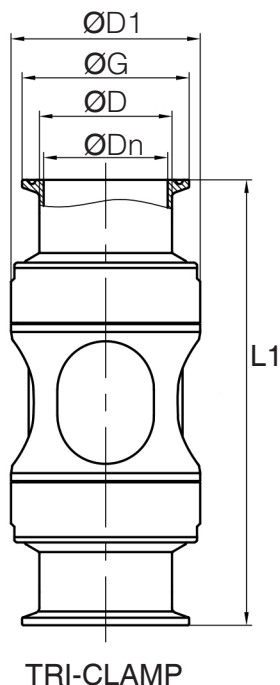
Dimensions

Series -SSG-ZT-WJ



Size	D	Dn	D1	L
3/4"	0.75	0.62	1.46	4.33
1"	1.00	0.87	1.61	4.78
1-1/4"	1.25	1.13	1.95	4.78
1-1/2"	1.50	1.37	2.24	5.04
2"	2.00	1.87	2.85	5.71
2-1/2"	2.50	2.34	3.50	6.93
3"	3.00	2.84	3.94	7.87
4"	4.00	3.83	5.31	8.27

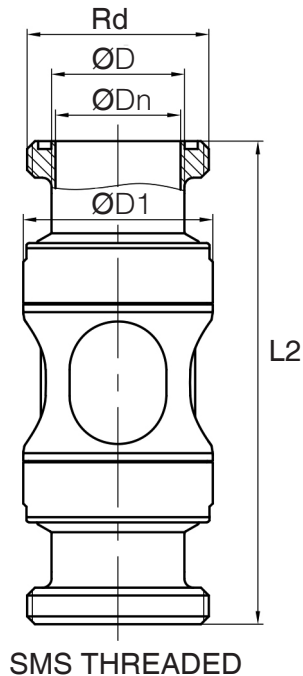
Series -SSG-ZT-WJT



Size	D	Dn	D1	G	L1
3/4"	0.75	0.62	1.46	0.98	4.53
3/4"	0.75	0.62	1.46	1.99	5.33
1"	1.00	0.87	1.61	1.99	5.78
1-1/4"	1.25	1.13	1.95	1.99	4.78
1-1/2"	1.50	1.37	2.24	1.99	5.04
2"	2.00	1.87	2.85	2.52	5.71
2-1/2"	2.50	2.34	3.50	3.05	6.93
3"	3.00	2.84	3.94	3.58	6.93
4"	4.00	3.83	5.31	4.69	8.27

Dimensions

Series -SSG-ZT-WJN



Size	D	Dn	D1	Rd	L2
3/4"	0.75	0.62	1.46	Rd35.5*1/8	5.83
1"	1.00	0.87	1.61	Rd39.5*1/6	6.28
1-1/4"	1.25	1.13	1.95	Rd47.5*1/6	6.20
1-1/2"	1.50	1.37	2.24	Rd59.5*1/6	6.61
2"	2.00	1.87	2.85	Rd69.5*1/6	7.28
2-1/2"	2.50	2.34	3.50	Rd84.5*1/6	8.82
3"	3.00	2.84	3.94	Rd97.3*1/6	9.84
4"	4.00	3.83	5.31	Rd124.3*1/4	10.39
4"	4.00	3.83	5.31	Rd131.3*1/6	10.39



Option:



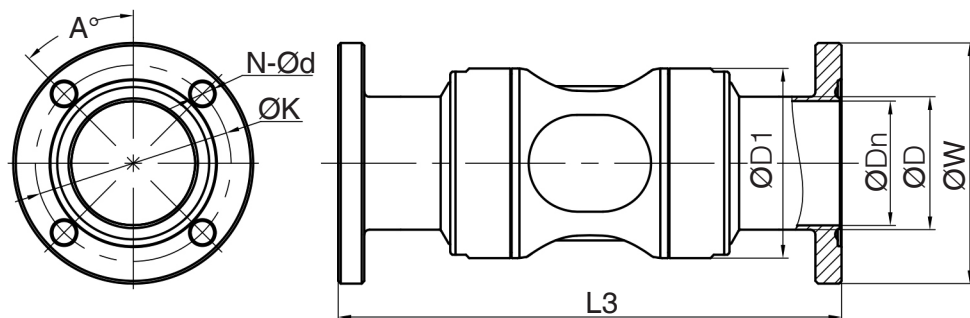
STAINLESS CAP NUTS



STAINLESS LIGHTING

Dimensions

Series - SSG-ZT-WJF



ASEPTIC FLANGED

Size	D	Dn	D1	W	K	N-Ød	A	L3
3/4"	0.75	0.62	1.46	2.32	1.65	4-9	1.77	6.22
1"	1.00	0.87	1.61	2.60	1.93	4-9	1.77	6.67
1-1/2"	1.50	1.37	2.24	3.11	2.44	4-9	1.77	6.93
2"	2.00	1.87	2.85	3.62	2.95	4-9	1.77	7.60
2-1/2"	2.50	2.34	3.50	4.21	3.50	8-9	0.89	8.82
3"	3.00	2.84	3.94	4.92	4.09	8--119	0.89	9.76
4"	4.00	3.83	5.31	6.18	5.31	8-11	0.89	10.31

Vtek
Controls

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