



valve
solutions &
technology



AXIAL CONTROL VALVE

Unique streamline flow in application to production

*Low power actuator $\leq 60W$ at 24V. Ideally for UPS battery operation or Solar powered system

AUTOMATED AXIAL VALVE

NOISE ATTENUATION

Size	4" ~ 20" (48")
Trim	128/64" to 1200/64"
Pressure	150# ~ 2500# (upto 10000psi)
Temperature	-101°C ~ 345°C (L + Y) & PSL3G, PR2
Connections	RTJ, BW, HUB,
Materials	NACE MR-01-75/ISO 15156

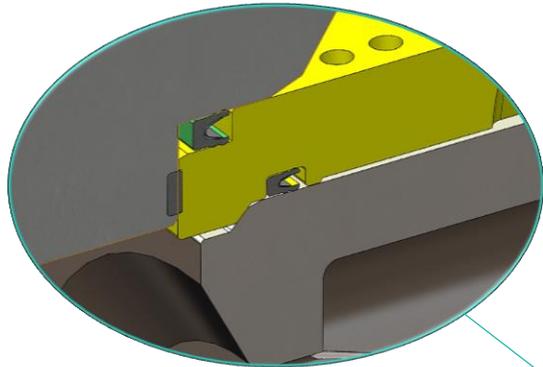
MARKET APPLICATION

- Choking / Control condition (Mix-Phase)
- Anti-surge Control
- ESD – Isolation (SIL-3)
- Slug Catcher
- Water to refined products High gas-oil multiphase fluids
- Natural gas (with contaminants - particle)
- Production
- Water Injection
- Gas Injection and Gas Lift
- Methanol injection



AXIAL Valves Features

World's best streamline improved process flow
Avoids vibration and reduces erosion by a factor 5. Ultra low pressure drop in system.
 This significantly maximizes production availability

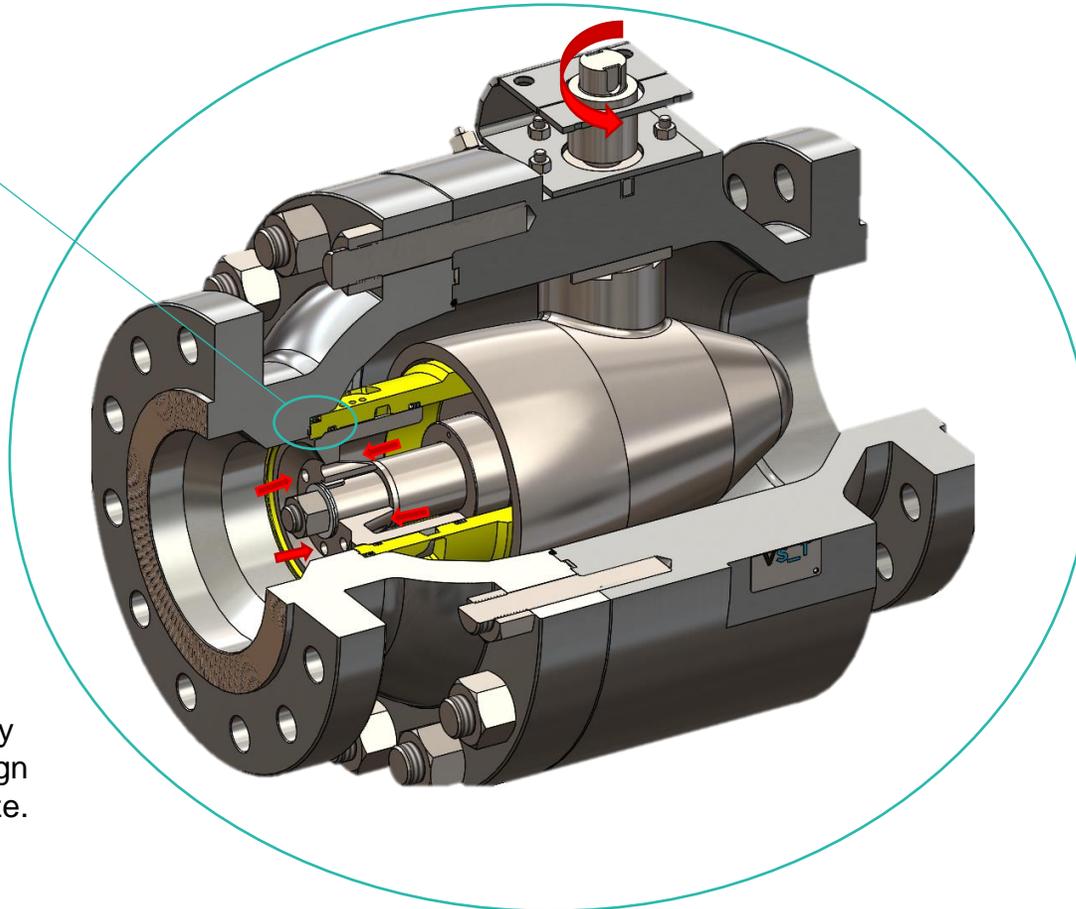


Bi-Direction tight (Class VI)
Tight shut-off

 **Quarter-turn Stem**
 Less friction, smaller / standard actuator
 scotch-yoke avoids fugitive emissions,
 fast stroking.

 **Unique body design with bonnet**
 Soft + Metal seal construction.
 Faster fabrication, Trim remove, In-line
 maintenance can be possible.

 **Extra High Capacity**
 Automated Axial valves inherent capacity
 twice than other design. The VS-T design
 special TRIM feature or reduce valve size.
 Plant outage and reduce the cost of
 ownership.

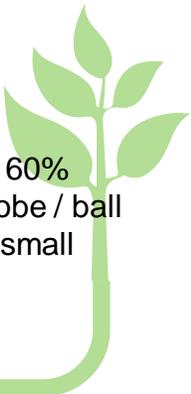


 **Noise Attenuation**
 Streamline outlet/inlet avoids turbulence and
 energy conversion. Delta P is taken over trim
 part only. Dynamic noise is attenuated.

 **Low-torque & Low energy Consumption**
 Ultra low torque / thrust valves moves
 easily because full pressure balance
 design to zero back force.

 **Cavitation proof Hard Core TRIM**
 Wear-resistant super fine grain material
 that will endure difficult service, without
 loss of sealing integrity.

 **Design – Compact**
 The valve body provided 30% to 60%
 weight reduction compared to globe / ball
 valves. In combination with very small
 actuation.



ADDITION FEATURES

VS-T axial control design incorporates hydrodynamic energy dissipation to reduce erosion problems while ensuring positive flow control with different Trim selection according process requirement.

Tailor made-design trims.

The high-velocity fluid or Gas streams produced by the flow collide in centre of the hard-core multi-hole TRIM. Since the fluid streams impinge directly with each other, this enables the most erosive energy to be dissipated. This in turn minimizes the risk of erosion damage to downstream parts.

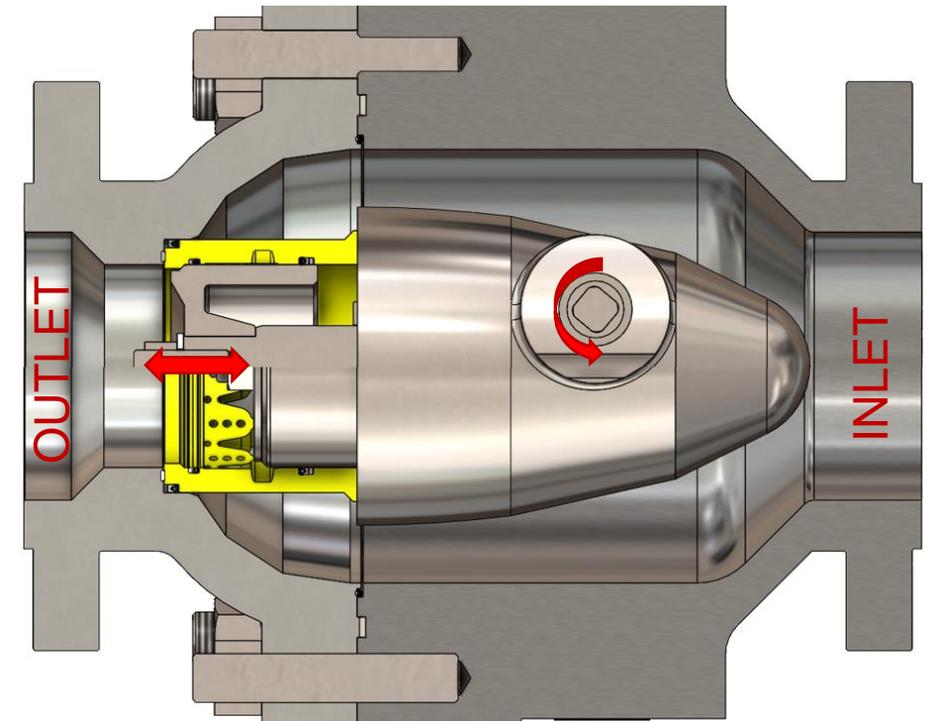
VS-T Axial control designed to provide precise flow control throughout their entire operation life, with a well-proven track record.

RZD- AXIAL CONTROL FEATURES

1. Tungsten carbide core parts. (92 HRC)
2. Solid tungsten carbide cage/seat provides excellent wear resistance against sand/slurry erosive conditions.
3. Metal + Soft seal Seat to gasket for safe pressure containment.
4. Streamline Axial over the plug flow improves flow dynamics recovery factor.
5. Self-flushing ,pressure balance ports reduce stem loads and actuator output torque/thrust.
6. TSO-Leakage class VI (FCI 70.2) best in class.
7. Pressure-balanced seals are advance bi-direction trim arrangement, reducing operating force and enabling great design life.



VALVE OPEN/CLOSE.



DIMENSIONS

ANSI Class 300 (PN50+)

ANSI Class 600 (PN100+)

ANSI Class 1500 (PN250+)

ANSI Class 2500 (PN 420+)

API5000

API10000

SIZE	FTF C TO IN / OUT (RF)	WEIGHT (KG)
3	283	75
4	305	125
6	403	185
8	502	325
10	568	365
12	648	390
14	762	560
16	838	710
18	914	1120
20	991	1890

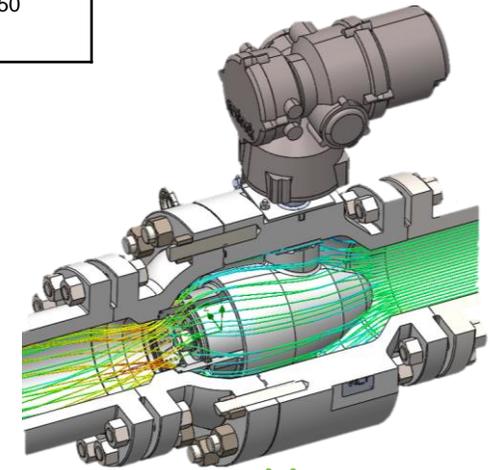
SIZE	FTF C TO IN / OUT (RF)	WEIGHT (KG)
3	356	71
4	432	102
6	559	160
8	660	353
10	787	820
12	838	1150
14	889	1470
16	991	2560
18	1092	2950
20	1194	3290

SIZE	FTF C TO IN / OUT (RTJ)	WEIGHT (KG)
3	473	102
4	549	140
6	711	312
8	841	559
10	1000	978
12	1146	1590
14	1276	2150
16	1407	2900

SIZE	FTF C TO IN / OUT (RTJ)	WEIGHT (KG)
3	584	210
4	683	520
6	927	940
8	1038	1600
10	1292	2400
12	1445	3400
14	1616	4700

SIZE	FTF C TO IN / OUT (RTJ)	WEIGHT (KG)
2-1/16	371	136
2-9/16	422	163
3-1/8	437	235
4-1/16	549	408
7-1/16	812	750

SIZE	FTF C TO IN / OUT (RTJ)	WEIGHT (KG)
2-1/16	520	235
2-9/16	565	344
3-1/16	619	458
4-1/16	670	585



QUALITY ASSURANCE



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Anchal Liddar
Senior Vice President of Global Industry Services

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