

Valbart[®] TCSGV and CEGV

API 6D monogrammed gate valves for liquid and gas pipeline applications



Experience In Motion



Engineered to exceed industry standards

Whether tank farm or terminal, liquid or gas, you demand reliable shutoff performance and durability out of your pipeline valves. The Valbart TCSGV and CEGV gate valves are designed to dependably tackle the toughest midstream applications.

- Engineered pipeline design Functionally qualified and monogrammed per API 6D to meet the most stringent pipeline design standards
- Ensured fire safety Tested and certified to API 607 and API 6FA fire-safe standards
- Improved seat leakage resistance Seat tightness conforms to API 6D and ISO 5208 standards
- Minimized fugitive emissions Proven stem seal design meets ISO 15848 2 Class B, to satisfy the most demanding fugitive emissions specifications

TCSGV – slab gate durability

The Valbart TCSGV through conduit slab gate valve is ideal for pipeline applications requiring pigging capability. Its full bore design features spring-energized seats and a floating slab gate to ensure both low- and high-pressure sealing capabilities. Robust design elements, such as slab gate guides and an engineered ribs profile, improve valve performance and increase product longevity.

Key benefits

- Tight shut-off performance with dependable bi-directional sealing on upstream and downstream sides even at low pressures ensured by floating slab and energized seat ring
- Increased working life of sealing components enabled by low-friction coatings and slab gate guiding mechanism, which reduce wear
- High strength-to-weight ratio due to optimized structural design with engineered ribs profile that minimizes deformation

Typical applications

- Mainline block valves
- Tank farm and station valves
- Launcher/receiver trap valves
- Emergency shutdown valves



CEGV – expanding gate reliability

The Valbart CEGV compact expanding gate valve provides long-term performance in critical pipeline and ancillary applications. Its full-bore, non-through conduit, expanding gate design creates a strong, dependable seal with less wear.

Key benefits

- High-integrity, tight shut-off performance in both upstream and downstream directions in severe services ensured by robust thermoplastic soft-seat and expanding gate design
- Greater longevity due to expanding gate design that reduces seal wear during opening and closing strokes
- Improved reliability provided by a unique internal control arm mechanism that unlocks the gate and segment from the expanded, closed position without requiring additional seals
- Reduced body and seat deflection due to engineered body structure that maximizes strength and stiffness while minimizing weight
- Lower installation costs and broader application flexibility with compact, lightweight design that can fit into confined spaces

Typical applications

- Tank farms
- Station valves
- Meter bypass
- Emergency shutdown





Industry-leading automation

Limitorque[®] MX electric actuators, V Series gearboxes and controls from Flowserve provide reliable automation of both the TCSGV and CEGV valves. Limitorque has a long history of providing high-performance, long-lasting actuators for a variety of industries. Pairing Limitorque automation with the TCSGV and CEGV valves results in an automated valve package with single-source engineering, supply and service.



Dimensional specifications

	TCSGV	CEGV
Size and pressure ratings ¹	NPS 4 to 30; Class 150	NPS 16 to 36; Class 150
	NPS 4 to 30; Class 300	NPS 16 to 36; Class 300
	NPS 4 to 24; Class 600	_
	NPS 4 to 20; Class 900	_
	NPS 4 to 12; Class 1500	_
Flow direction	Bidirectional	Preferred direction, segment upstream
End connection	Flanged RF/RJ, butt weld, hub end	Flanged RF
Face-to-face dimension ²	As per API 6D and ASME B16.10	As per API 6D and ASME B16.10
Trim area	Full bore (piggable) and reduced bore to API 6D	Full bore (non-piggable) to API 6D

(1) Other sizes available upon request

(2) Special face-to-face dimensions available upon request

Common specifications - TCSGV and CEGV

Design	API 6D, ASME VIII	
Stem seal	PTFE chevron packing with graphite ring	
Lookago rotoo	API 6D, ISO 5208 (Rate A soft seat;	
Leakage rates	Rate D metal seat)	
Operating temperature range	-29°C to 190°C (-20.2°F to 374°F)	
Design temperature range	-46°C to 210°C (-50.8°F to 410°F)	
Fire-safe	API 607, API 6FA	
Fugitive emissions	ISO 15848 — 2 Class B	

Flowserve Corporation 5215 North O'Connor Blvd. Suite 2300 Irving, Texas 75039-5421 USA Telephone: +1 937 890 5839 3993 West Sam Houston Parkway North Suite 100 Houston, Texas 77043 Telephone: +1 713 803 4400 Flowserve Corporation has established industry leadership in the design and manufacture of its products. When properly selected, this Flowserve product is designed to perform its intended function safely during its useful life. However, the purchaser or user of Flowserve products should be aware that Flowserve products might be used in numerous applications under a wide variety of industrial service conditions. Although Flowserve can provide general guidelines, it cannot provide specific data and warnings for all possible applications. The purchaser/user must therefore assume the ultimate responsibility for the proper sizing and understand the Installation, operation, and maintenance of Flowserve products. The purchaser/user should read and understand the Installation Instructions included with the product, and train its employees and contractors in the safe use of Flowserve products in connection with the specific application.

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