TRI LOK®-Cx
TRIPLE OFFSET BUTTERFLY VALVE

OVERVIEW

Tri Lok®-Cx is the premier isolation valve for operation in light vacuum to high-pressure applications. The non-rubbing, metal-to-metal seal delivers zero-leakage bidirectional shutoff with minimal torque, and is certified firesafe. Compared to gate, globe, or ball valves of the same size and pressure class, Tri Lok®-Cx provides space and weight savings, while minimizing installation and maintenance costs.

APPLICATIONS

- Steam distribution
- Industrial gases
- Tank farms and storage
- Hydrocarbon processing
- Petrochemical processing
- Chemical processing
- Hydrogen service
- Reactor isolation
- Loading and unloading
- Safety related applications
- Flare systems
- Emergency shutdown (ESD) applications

SPECIFICATIONS

Size Range[1]	DN 80 to 600
Temperature Range[2]	-60°C to 400°C
Pressure Rating	PN 10 | PN 25 | PN 40
Body Style	Lug | Double Flanged
Tightness Test[3]	Zero-leakage EN 12266 Rate A

NOTES
1 Larger sizes available on request.
2 Other temperatures available on request.
3 All valves tested bidirectionally.

MATERIAL OPTIONS[1]

Body	Carbon Steel
	Stainless Steel
Disc	Carbon Steel
	Stainless Steel
Seat	Stainless Steel (Hardened)
Seal Ring	Laminated: Duplex Stainless Steel + Graphite
	Solid Seal: Duplex Stainless Steel
Stem	410 Stainless Steel
	XM-19 (Nitronic® 50)

NOTE
1 Other materials available upon request.

DESIGN STANDARDS

Valve Design	EN 12516-1 | EN 12569 | EN 593
Material Standard	EN 16668 | AD2000 W0
Marking	EN 19 | DIN EN IEC 61406 | DIN 91406
Top Flange	ISO 5211
Flange Drilling	EN 1092-1
Face-to-Face	EN 558
Testing Standard	EN 12266-1 & 2 | NE 167
AutoID/ID Link	DIN 91406/IEC 61406

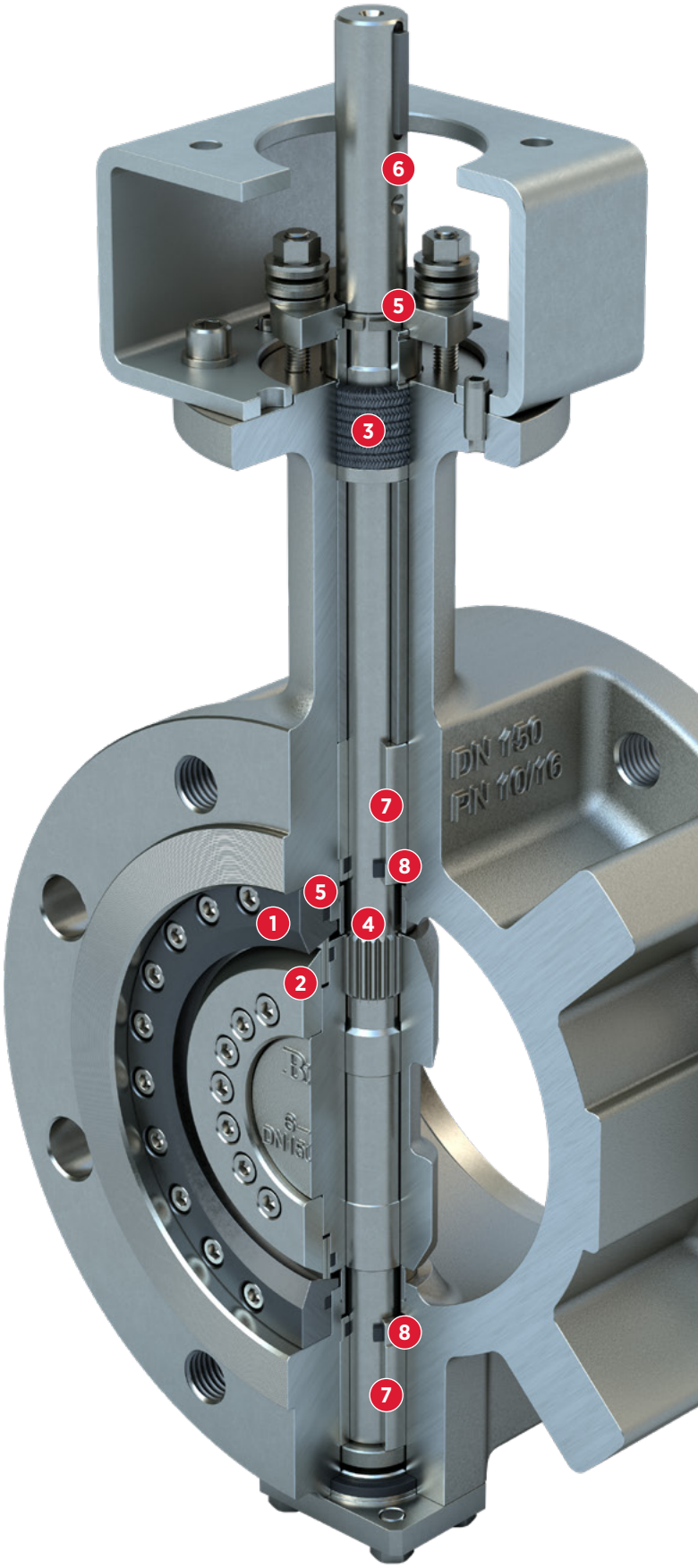
CERTIFICATIONS & APPROVALS

Certifications	CE: PED 2014/68/EU
	SIL 3 capable
	UKCA
Fire Test	ISO 10497
Fugitive Emissions	ISO 15848-1
	TA-Luft 2021
Approvals	ATEX 2014/34/EU

FEATURES

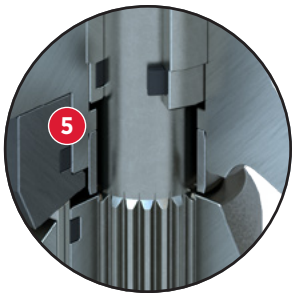
The Tri Lok®-Cx features a fully adjustable, field replaceable seat and seal system that extends overall service life, minimizes downtime, and reduces the need for costly offsite repairs or total valve replacement.

1. **SEAT:** The hardened seat reduces the risk of galling, offering superior performance and durability.
2. **SEAL RING:** Offers a flexible design and wide range of materials to provide torque-loaded sealing with zero-leakage.
3. **LIVE LOADED STEM PACKING:** Fully adjustable, field replaceable stem seal system is certified to international fugitive emission standards.
4. **SPLINED DISC-TO-STEM CONNECTION:** Strong, reliable connection allows for axial movement, prevents misalignment, minimizes hysteresis, and eliminates external connections.
5. **ROBUST BLOWOUT-PROOF STEM:** The one-piece stem features a blowout prevention ring located above the packing box, outside the pressure boundary. The stem is also mechanically retained for additonal protection.
6. **INDEXED STEM:** Provides positive visual indication of disc/seal ring position after installation.
7. **STEM BEARINGS:** Elongated to provide maximum stem support, and hardened to reduce wear.
8. **BEARING SEALS:** Minimize ingress of media into the journal.
9. **DIGITAL TAG:** Each valve is uniquely and easily identifiable by simply scanning the QR Code on the product identification tag in accordance to IEC 61406.



BLOWOUT-PROOF STEM

Blowout Prevention Ring
Located outside pressure boundary.



Mechanical Retention
For additional blowout protection.