

SERIES 943/953 UNIDIRECTIONAL KNIFE GATE VALVES



OVERVIEW

The Series 943 features a full lug and the Series 953 features a semi-lug, single piece cast body for demanding applications. The standard metal-to-metal seating is engineered for general purpose on/off service and isolation of clean, dirty, corrosive, abrasive, viscous, and high temperature media. Optional zero leakage resilient seats are available.

SPECIFICATIONS

Size Range	NPS 2 to 24 DN 50 to 600	
	943	953
Pressure Rating	2-24 150psi 50-600mm 10 bar	2-10 150psi 50-250mm 10bar
		12-16 90psi 300-400mm 6bar
		18 75psi 450mm 5bar
		20-24 60psi 500-600mm 4bar
Body Style	Single Piece Lug	Single Piece Semi Lug

INDUSTRY APPLICATIONS

Water/Wastewater

General Industrial

Mining

Pulp & Paper

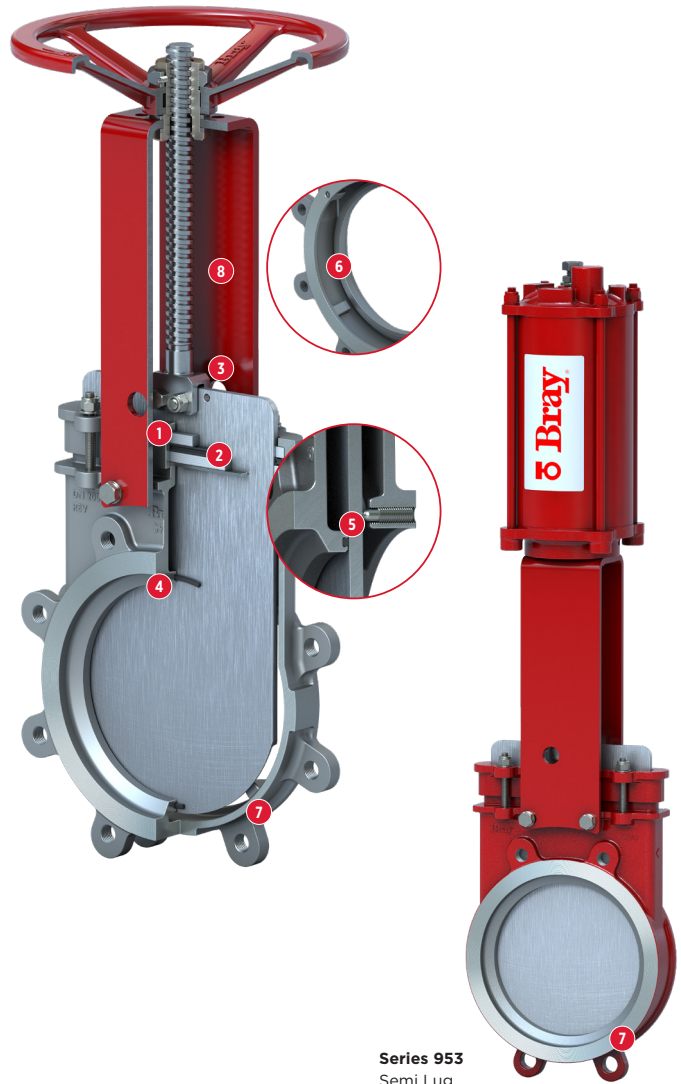
Power

Chemical

Food & Beverage

FEATURES

- 1 Inverted packing gland extends packing life and simplifies replacement.
- 2 Standard energized quad seal packing provides exceptional gland sealing.
- 3 Clevis design and horizontal bolting stabilizes gate ensuring proper alignment.
- 4 Standard metal seated, also available with optional unique self-locking RPTFE seat or replaceable O-Ring soft seat for high performance unidirectional sealing.
- 5 Adjustable gate guides provided to fine tune the gate-to-seat contact and assist with back pressure.
- 6 Cast in gate guides eliminating welding in the body and precision machined wedging for ultimate sealing.
- 7 Optimized body design is offered in both lugged and semi lugged design to maximize performance without unnecessary weight. Lugged body suitable for all mounting orientations including dead-end service.
- 8 Carbon steel, stainless steel, or alloy superstructure ensures robustness in valve design for different operators/orientation.
- 9 Optional replaceable deflection cone, available in Chrome Iron and Polyurethane, can be provided to protect the seat from abrasive media.



Series 953
Semi Lug

STANDARD CONSTRUCTION

	943	953
Body	CF8M (316)	Cast Iron
Gate	316	304
Seat	Integral Metal	Integral Metal
Stem	304	304
Gland	CF8	Ductile Iron
Packing	PTFE Impregnated Synthetic Fiber w/Quad Seal	PTFE Impregnated Synthetic Fiber w/Quad Seal
Topworks	Carbon Steel	Carbon Steel

DESIGN STANDARDS

Face-to-Face	MSS SP-81	
Flange Drilling	ASME B16.5 CL150	
Design Standard	943 MSS SP-81	953 Manufacturer Standard
Testing Standard	MSS SP-151	

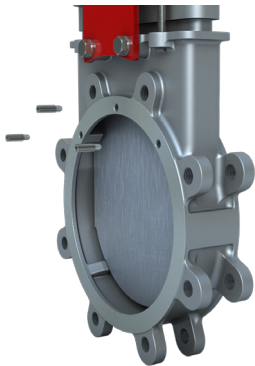
MATERIAL OPTIONS

Body	943 - Carbon Steel (WCB) CF8 Stainless Steel CF3 Stainless Steel CF3M Stainless Steel CE3MN Duplex Steel (SS 2507) CD3MN Duplex
	953 - Ductile Iron
Gate	304, 317 Stainless Steel Hastelloy® C SAF 2507 Duplex Monel® 17-4PH Stainless Steel Titanium
Stem	316
Packing	Pure PTFE PTFE w/Buna-N Quad Seal PTFE w/Viton Quad Seal PTFE w/EPDM Quad Seal PTFE w/Copper Wiper Graphite
Seat	NBR EPDM FKM RTFE UHMW

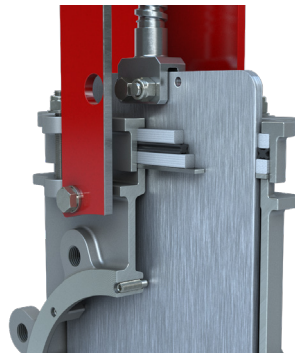
ACTUATOR OPTIONS

Direct Mounted Handwheel | Bevel Gear Operator | Lever
 Double Acting Pneumatic | Hydraulic | Electric

FEATURES - DETAILED



Gate Guides

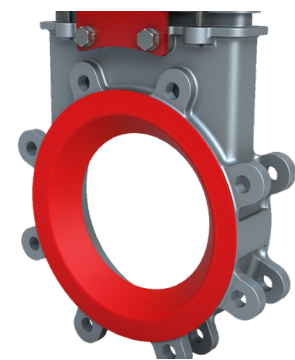


Inverted Packing Gland



Rigid U-Shaped Frame

DEFLECTION CONE



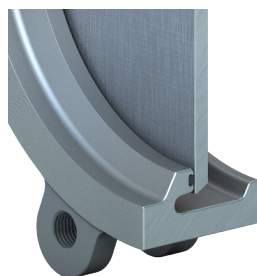
Recommended for abrasive flow applications to direct the flow away from the seat.

SEAT OPTIONS

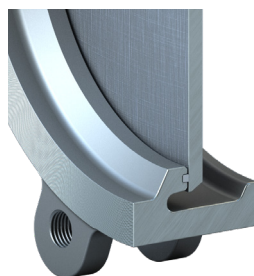
Standard integral metal seat and optional replaceable zero leakage resilient seat.



Metal Seat



Soft Seat



PTFE Seat