

Wey Knife Gate Valve Model VM

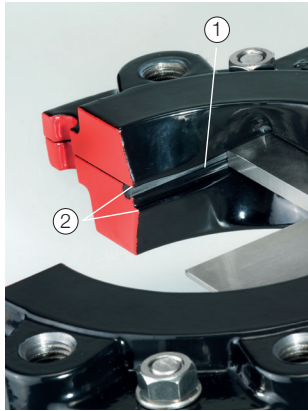
Ductile Iron Full Lug Design



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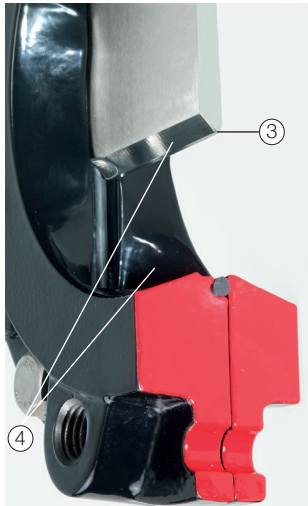
Unique Wey sealing system for high performance duties:

The Wey Knife Gate Valve Model VM is built to high quality manufacturing standards and combines rugged construction with time-tested design refinements found in no other knife gate valve. This unique design assures long-life reliability and bubble-tight shut-off.



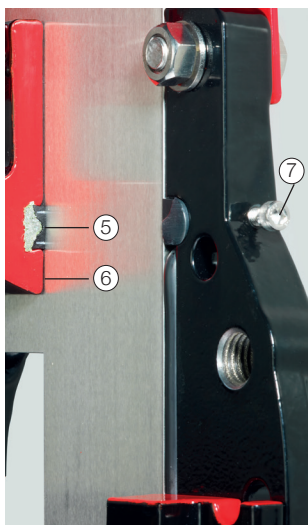
① Tight shut-off is assured due to the unique sealing combination of resilient elastomer **along the edges (not the face) of the gate** and machined metal gate guides. Fine surface ground finish of the gate ensures smooth operation and long-life seal performance. Mechanically retained seal prevents “pull-out.”

② **Machined gate guides in the valve body** guide and support the gate for the full length of the stroke insuring against gate “flutter.” These sealing features provide bi-directional bubble-tight shut-off at full design pressure.



③ During final closing stage, remaining solids are sheared off by **knife-like gate** and body cutting edge.

④ Special gate geometry prevents jamming during closure because deposits are pushed ahead by the gate into **enlarged flushing corners** of the body. Contoured body interior initiates flushing action to prevent build-up and jamming of deposits in seat area.



⑤ Unique Wey **transverse seal** eliminates stuffing box. A special lip-seal profile insures against leakage to atmosphere. Compressed sealing compound provides sealing pressure, compensates for wear and assures outstanding high performance service life in a wide range of tough applications.

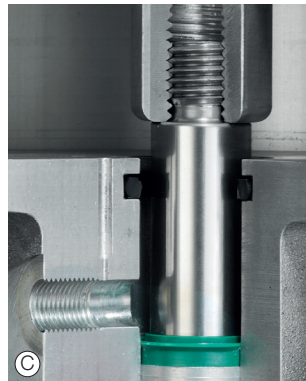
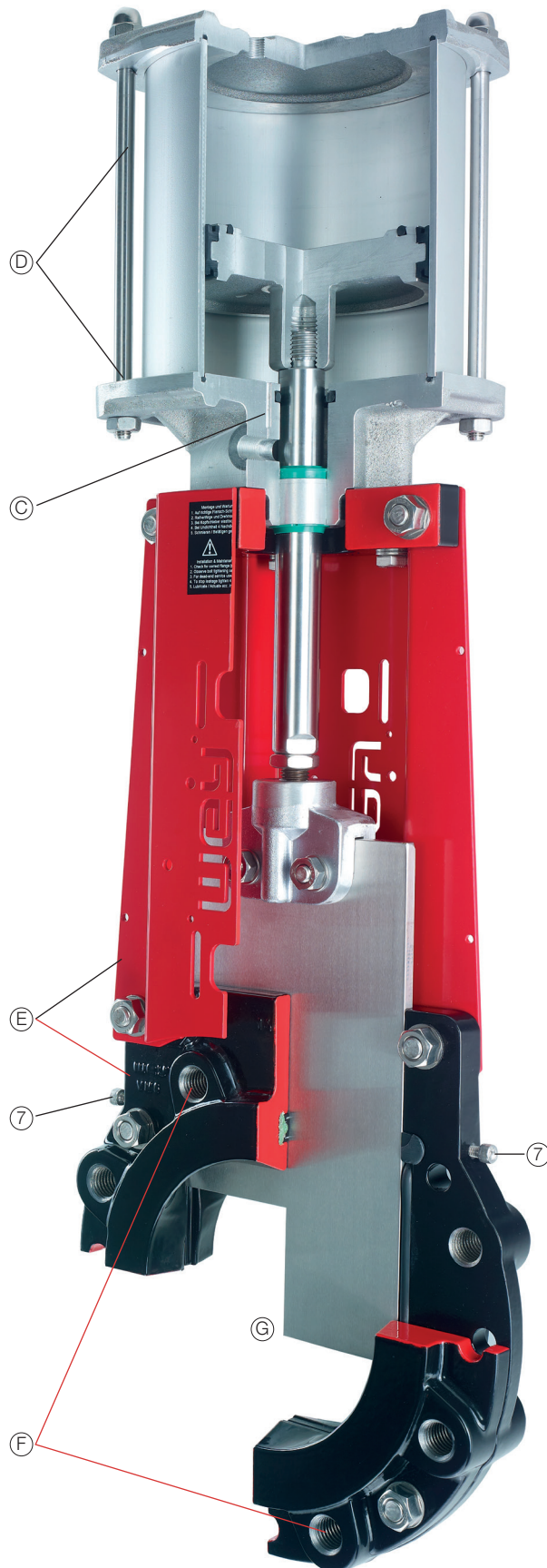
⑥ **Minimized chest area** between port and transverse seal leaves no space for solid build-up or jamming.

⑦ By tightening **packing screws** or inserting sealing compound pellets, repacking under full pressure and without system shut-down is always possible. Considerable time/cost savings in maintenance work has persuaded customers for decades to install Wey Knife Gate Valves.



See live demonstration

Additional features



- (A) Solid steel topwork provides maximum strength, partial disassembly of support for easy access to mechanical parts, and facilitates mounting of:
 - mechanical or proximity limit switches
 - solenoid valves
- (B) Non-rising stem design with manual actuation saves space and provides for protected stem and stem nut operation. Rising stem design set as standard from 18" to 24", non-rising stem is optional.
- (C) The cushioned (shut) pneumatic cylinder prevents pressure shocks and initiates flushing action.
- (D) As an option, pneumatic cylinders can be supplied with magnetic piston design together with open and closed magnetic proximity switches mounted directly on cylinder.
- (E) Epoxy powder coating with additional primer for body and topwork with stainless steel screws provide excellent corrosion protection.
- (F) Full-lug type design provides for ease of installation and permits dead-end service.
- (G) Full bore opening effects low pressure drop and permits the use of all known pigging devices (e.g. spherical, cylindrical, brush pigs, etc.)

Service

Municipal

Raw Sewage, Sewer Sludge, Waste Water with solids, etc.

Process

Viscous Paste, Colloids, Granulates, Chemical Waste, Textile Slurry, Pellets, Powders, Cement

Power Generation and Mining

Mill Scale, Coal Dust and Slurry, Mine Slurry, Lime Slurry

Actuator options

Handwheel
Chainwheel
Square drive nut
Manual bevel gear
Pneumatic cylinder
Hydraulic cylinder
Electric actuator

Materials construction

Description	Ductile Iron - Construction		Accessories
	Standard	Option	
Body	A536 (60-40-18)		Solenoid, Mechanical limit switches, Proximity switches, Wear ring, Pneumatic positioner, Electronic positioner, V-Port insert, Lock-out, Position indication scale, OSHA yoke guard, Scale cutter, Weyotine shear cutter, Powder-Pac option
Gate	304 SS	316L, 304L	
Seal	NBR	FKM, EPDM, PTFE	
Topwork	Steel	316L	
Stem/Piston rod	Cr-Steel AIS1430F	316L	

Other materials upon request

Corrosion protection

Standard

Body Coating (Epoxy powder), black RAL 9005
Topwork Coating (Epoxy powder), red similar RAL 3020
Handwheel Coating (Epoxy powder), black RAL 9005
Screws Screws in stainless steel

Remark Stainless steel parts without coating

Construction details

Application

Valve Size	Pressure rating ANSI	Flange drilling	Test acc.	Face-to-Face
2"-24"	150psi	ASME/ANSI B16.5-150	AWWA C520-10	AWWA C520-10 MSS SP-81 ASME B16.10

Temperature

-40°F to 450°F with suitable material and construction selection