PETROLVALVES GROUP
enabling your energy flow

THROUGH CONDUIT SLAB GATE VALVES

introduction

PETROLVALVES' is a leading manufacturer of valves for the oil and gas industry.
Formed in 1956, **PETROLVALVES** has grown to a company with sales, services and manufacturing facilities throughout the world with direct presence in the United States, Norway, United Kingdom, Italy, Singapore and Australia.

The continuous investment in development of new technology has resulted in the growth and ongoing success of our company. **PETROLVALVES** line of production includes some of the most sophisticated valve products in the world with a strong focus on the development of custom or niche products designed according to customer's specific requirements.

PETROLVALVES has been manufacturing through conduit slab gate valves since the 1970s, and has participated in some of the largest oil & gas projects in the industry.
Through Conduit Slab Gate Valves can be used in many applications. Our valves have been installed in numerous projects around the world, in on/off, ESDV (Emergency Shutdown Valve) and HIPPS (High Integrity Pressure Protection System) valve applications.
Designing for increasing maximum allowable pressures for Slab Gate Valves, through continuous research and development to meet our clients' new requirements, is one of our major objectives. The resulting design expertise guarantees the product reliability improvement year by year.

through conduit slab gate valves

BASIC INFORMATION

STANDARD SERVICE: for natural gas, LNG, crude oil, refined products transmission lines as well as in many other general industrial and oil&gas applications.

For example:

- transmission pipelines
- pumping, compression and reinjection
- offshore platforms
- onshore terminals
- pig traps
- measuring stations
- surge-relief skids
- blowdown

SUB-PRODUCT TYPE

	DESIGN	PRESSURE CLASS	MODEL
THROUGH CONDUIT SLAB	Cast body	API 6A	918
	Standard	API 6A	969
		API 6D	600
	Internal screw	API 6D	660
	Wafer	API 6D	680

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SPECIAL SERVICE

- HIPPS
- ESD
- SSIV
- HIGH/LOW TEMPERATURE
- DIRTY / ABRASIVE SERVICE
- PIG TRAP

RANGE OF PRODUCTION (*)				
API 6D/class	150 to 600	900	1500	2500
size	2" to 84"	2" to 48"	2" to 48"	2" to 30"
API 6A class	API 3000	API 5000**	API 10000	API 15000
size	up to 34"	up to 34"	up to 34"	10"
(*) for non listed dimensions contact PV's staff				

through conduit slab
DESIGN FEATURES

MAIN DESIGN FEATURES	SPECIAL FEATURES	ACCESSORIES
▸ API 6D or API 6A ▸ ASME B16.34 ▸ Metal seat ▸ Fire Safe ▸ Full bore ▸ Bidirectional/ Unidirectional ▸ Self Relieving ▸ Anti blow out stem ▸ Anti static device ▸ Standard-Reverse	▸ NACE Requirement ▸ Negligible pressure drop ▸ Piggability ▸ Special bore ▸ Back seat ▸ Full/partial cladding ▸ Equalizing hole in gate ▸ Extended stem ▸ Extended bonnet ▸ Bubble tight sealing in both direction ▸ Double Block & Bleed (*) ▸ Ad hoc design for horizontal stem installation and or vertical pipeline installation (**) ▸ Ad hoc engineering to suit customer projects requirements	**Vent & Drain:** ▸ Plugged ▸ Flanged ▸ With valve ▸ Any type of connection upon request **Seat / Stem Injection:** ▸ Plugged ▸ Flanged ▸ With isolation valve ▸ Any type of connection upon request

(*) upon request

(**) inclusive of any special tooling may be needed to maintain the valve in situ

PETROLVALVES' engineering department is specialized in fulfilling all customer's requirements and project specifications.

gate valves

SEALING

BODY SEALING

All primary body gaskets are metal-to-metal, spiral wound, or ring type joint.

Available upon request:

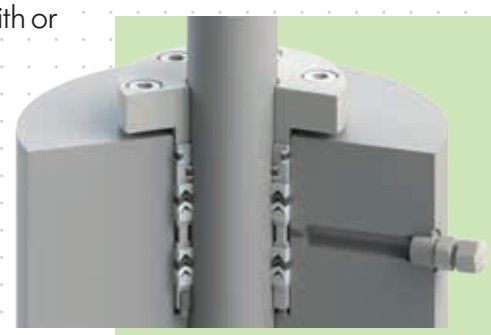
- Secondary soft gasket to introduce a redundant barrier
- Leak port detector

STEM SEALING

PTFE Chevron Type: Thermoplastic multiple V-rings, with or without lantern ring.

Available upon request:

- O-ring sealing
- Graphite sealing
- Metal-to-metal stem seal in addition to the standard termoplastic seals
- Sealant injection capability (optional)
- Redundant elastomeric (AED) stem gasket
- Leak port detector



SEAT SEALING

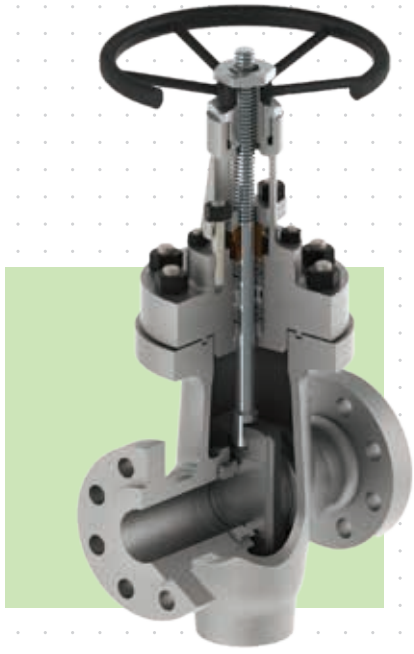
PETROLVALVES slab gate valve construction includes spring energized floating seats, which provide positive seating on both sides, regardless of upstream or downstream pressure conditions. The seat seals are spring energized to ensure sealing under low pressure conditions. When the line pressure increases, the seat-to-gate contact pressure increases accordingly to provide positive shutoff. Since both seats are individually energized by differential pressure across the seat itself, the valve cavity can be vented when the upstream and / or downstream side is pressurized. The valve exhibits identical performance, regardless of direction of flow, and /or orientation of differential pressure.
Different solutions are available for seat-to-body gaskets, depending on service fluid type, pressure, and temperature conditions.

ELASTOMERIC GASKET

POLYMERIC GASKET

reverse and standard
ACTING DESIGN

The Through Conduit Slab Gate Valve is designed and manufactured with the rising stem to accommodate the floating movement of the gate. During the valve operation, the line fluid fills the bore cavity. The fluid pressure in the bore cavity generates a vertical force on the stem that pushes the trim from bottom to top. In case of emergency this force is used to assist the actuator spring to bring the valve gate to the required failure mode position.



STANDARD ACTING

The standard acting design means the valve is closed with the gate/stem downwards, and is common for fail open configuration, because the "stem ejection force" assists the actuator spring to open the valve.

REVERSE ACTING

The reverse acting design means the valve is closed with the gate/stem upwards, and is common for fail close configuration, because the "stem ejection force" assists the actuator spring to close the valve.

materials

PETROLVALVES through conduit slab gate valves have been designed for use with various combinations of materials which are selected to better suit service conditions.

AVAILABLE BODY MATERIAL SELECTION	AVAILABLE OBTURATOR MATERIAL SELECTION SOFT SEAT EXECUTION	AVAILABLE OBTURATOR MATERIAL SELECTION SOFT SEAT EXECUTION
▸ CS, LTCS (*) ▸ Low Alloy Steel (*) ▸ Stainless Steel ▸ Duplex, Superduplex, Ni Alloy	▸ CS, LTCS (*) ▸ Low Alloy Steel (*) ▸ Austenitic / Ferritic / Martensitic Stainless Steel ▸ Duplex, Superduplex, Ni Alloy Option ▸ Electroless Nickel plating	▸ CS, LTCS ▸ Low Alloy Steel ▸ Austenitic / Ferritic / Martensitic Stainless Steel ▸ Duplex, Superduplex, Ni Alloy Secondary seal material ▸ PTFE, RPTFE, PCTFE, PEEK, DEVLON, NYLON Option ▸ Electroless Nickel plating

(*) CRA weld overlay option available

AVAILABLE BODY MATERIAL SELECTION	AVAILABLE OBTURATOR MATERIAL SELECTION METAL SEAT EXECUTION	AVAILABLE SEAT MATERIAL SELECTION METAL SEAT EXECUTION
▸ CS, LTCS (*) ▸ Low Alloy Steel (*) ▸ Stainless Steel ▸ Duplex, Superduplex, Ni Alloy	▸ CS, LTCS (*) ▸ Low Alloy Steel (*) ▸ Austenitic / Ferritic / Martensitic Stainless Steel ▸ Duplex, Superduplex, Ni Alloy Hardfacing ▸ Tungsten / Chromium carbide coating	▸ Low Alloy Steel ▸ Austenitic / Ferritic / Martensitic Stainless Steel ▸ Duplex, Superduplex, Ni Alloy Hardfacing ▸ Tungsten / Chromium carbide coating

(*) CRA weld overlay option available

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