

ASR Flow Control Valve



ASR Flow Control Valve:

The IPI ASR Flow Control Valve is a robust downhole valve designed specifically for Aquifer Storage and Recovery (ASR) and other injection applications. The valve is installed on the pump column or riser pipe, positioned within the well completion to provide precise flow management directly at depth.

With dual-mode functionality, the valve seamlessly switches between injection and recovery, giving operators complete control of well performance from the surface. Engineered with hydraulic actuation, a flush internal bore, and precision-machined radial ports, the ASR Valve delivers smooth, proportional flow control while minimising surges, fouling, and maintenance requirements. Built from stainless steel, it withstands harsh environments and ensures long service life.

Applications:

- ◆ Aquifer Storage & Recovery (ASR)
- ◆ Groundwater Remediation
- ◆ Reclaimed Wastewater Recharge
- ◆ Seawater Intrusion Barriers
- ◆ Brine Disposal

Benefits:

- ◆ It allows seamless transition between injection and recovery, giving operators full flexibility to manage well performance efficiently from the surface
- ◆ The pentagonal ports distribute the flow radially and proportionally around the valve, ensuring stable and even fluid distribution
- ◆ This unique port geometry enables a gradual increase in valve opening, minimising pressure surges and extending the life of the system
- ◆ The flush internal bore supports unrestricted flow during recovery, reducing turbulence, preventing scale build-up, and maximising efficiency
- ◆ High-grade stainless-steel construction, combined with protective thread coatings, provides excellent resistance against corrosion, scaling, and biofouling, lowering maintenance costs and ensuring long service life
- ◆ Dedicated lifting points and integrated line pathways enhance safety by making handling, installation, and cable management simple and secure
- ◆ An optional priming port prevents air fouling and calcite formation, maintaining system reliability
- ◆ For operators requiring automation, the valve can be paired with a surface PLC control unit

Specifications:

Top Connection	6in BSPT Box	Priming Port	0.5in NPT
Lower Connection	6in BSPT Pin	External Line Pathway Width	50mm
Max OD	260mm	Max Pressure Rating (Piston Housing Collapse)	1,500psi
Min ID	59mm	Max Temperature Rating	70°C
Total Weight	168kg	Minimum Tensile Strength	50Klbs
Surface Control Line Ports	0.25in NPT	Piston Ratio	1.2:1

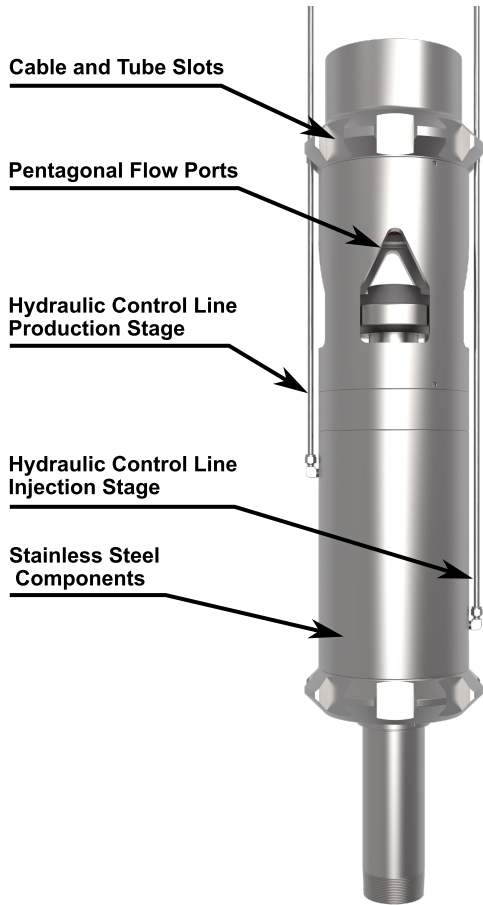
* Other sizes available upon request



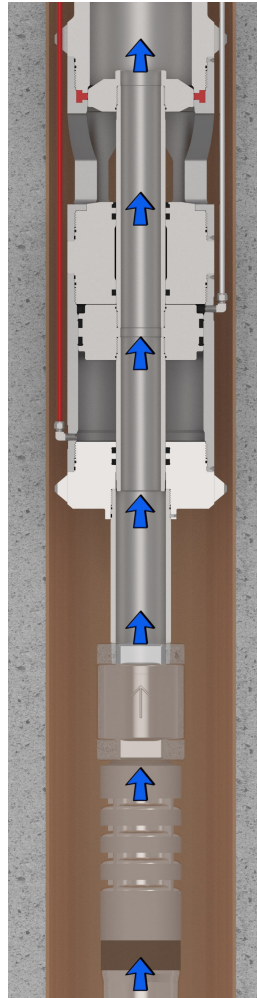
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Stages of Operation:

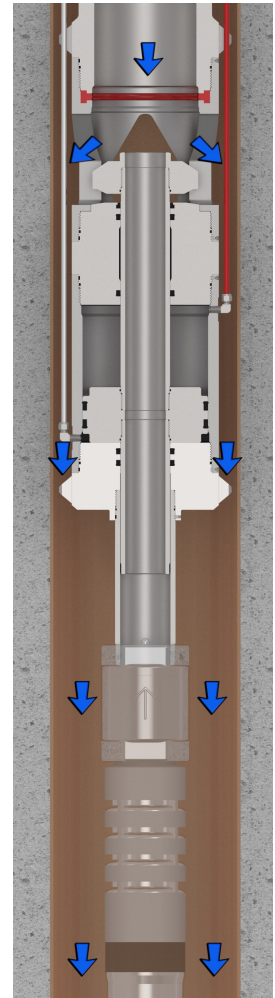
Main Parts and Features



Water Production



Injection Mode



Flow Coefficient vs. Piston Travel:

