S-CON

SLURRY FLOW CONTROL

BUTTERFLY VALVE & PLUG VALVE



S-CON BUTTERFLY VALVE

Suitable for Fine Particle Slurries

Applications

Bauxite Slurry
Coal Slurry

Lime Slurry

Ore Beneficiation Points

Oil Recovery Points Iron Ore Slurry Post Ball Mill Discharge

Benefits

- Longer service life
- Reduce maintenance downtimes
- Ceramic liner
- Provide control of severe slurries
- Eliminate high velocity areas common in butterfly control valves
- Split shaft design to assist on flow direction to centre of disc
- Minimised inflow turbulence
- Shaft position indicator
- 'Correct Size' gasket fitted
- AFLAS seals Ammonia resistant
- Same face to face dimensions with common valves
- Uses standard 90° actuator
- Valve train supplied as turnkey assemblies
- Serial number tracking



Materials: Body: SG CAST IRON/STEEL

Shaft: 431 STAINLESS STEEL/RK65 Disc: PSZ CERAMIC/CARBIDE

Seals: AFLAS Packing: PTFE

Ends: TABLE D, ANSI, DIN

Gaskets: PTFE (other material optional)

Bore/Part: STANDARD BORE, REDUCED BORE (LINER OR SEAT)

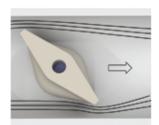
Actuator Mount: ISO MOUNT

Options

- Actuators
- Positioners
- Venturi spool piece
- Inlet reducer
- Spare parts
- Repair exchange
- Alternative actuator mounting kits

(Options can be supplied loose or factory fitted)

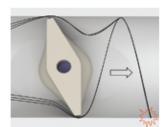
Favourable Disc Position



In the optimum disc control position (25°-65° open), the flow after the disc is laminar with minor turbulence. This is why a smaller S-CON valve vs pipeline size is normally

selected

Unfavourable Disc Position



If the disc is operating at < 20° open, an extremely high velocity flow is created beside the disc. This high velocity flow will then reflect off the liner and will create a tremendous wear point

Technical Information

Mounting Pad

Valve Size (mm)	ISO	Fastener Size	PCD	Square Drive	
40	F07	M8	70	17	
50	F07	M8	70	17	
80	F07	M8	70	17	

Torque in Nm - Severe Service

Class 150 (add 50% for class 300)

Add 50% for actuation

Valve Size	Pressure Drop (kPa)								
(mm)	0	175	350	500	700	850	1000	1200	1400
40	31	31	32	32	33	33	34	34	35
50	38	38	39	40	41	41	42	42	43
80	55	56	57	58	59	60	62	63	64

S-CON PLUG VALVE

Suitable for Large Particle Slurries

Applications

Bauxite Slurry
Coal Slurry
Oil Recovery Points
Post Ball Mill Discharge

Lime Slurry
Ore Beneficiation Points
Iron Ore Slurry

Benefits

- Longer service life
- Reduce maintenance downtimes
- Ceramic liner
- Provide control of severe slurries
- Minimised plug tip width to minimise scat impingement
- Clear bore in fully open position
- Minimised inflow turbulence
- 'Correct size' gasket fitted
- AFLAS seals Ammonia resistant
- Same face to face dimensions with common valves
- Uses standard 90° actuator
- Valve train supplied as turnkey assemblies
- Manual override
- Serial number tracking

Standard Features

Materials: Body: SG CAST IRON/STEEL

Shaft: 431 STAINLESS STEEL/RK65 Disc: PSZ CERAMIC/CARBIDE

Seals: AFLAS Packing: PTFE

Ends: TABLE D, ANSI, DIN

Gaskets: PTFE (other material optional)

Bore/Part: STANDARD BORE, REDUCED BORE (LINER OR SEAT)

Actuator Mount: ISO MOUNT

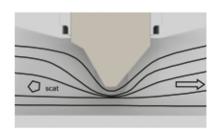


- Actuators
- Positioners
- Venturi spool piece
- Inlet reducer
- Spare parts
- Repair exchange
- Alternative actuator mounting kits

(Options can be supplied loose or factory fitted)



In the fully open position, the S-CON plug valve has a full bore compared to the butterfly valve eliminating the risk of large particles blocking & disc breakage.

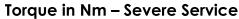


The tapered faces of the S-CON plug will almost eliminate the risk of scats getting impinged.

Technical Information

Mounting Pad

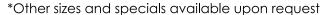
Valve Size (mm)	ISO	Fastener PCD		Square Drive	
40	F07	М8	70	17	
50	F07	M8	70	17	
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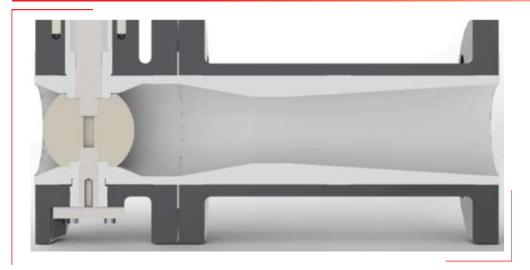
Class 150 (add 50% for class 300)

Add 50% for actuation

Valve Size	Pressure Drop (kPa)								
(mm)	0	175	350	500	700	850	1000	1200	1400
40	93	93	96	96	99	99	102	102	105
50	114	114	117	120	123	123	126	126	129
80	165	168	171	174	177	180	186	189	192



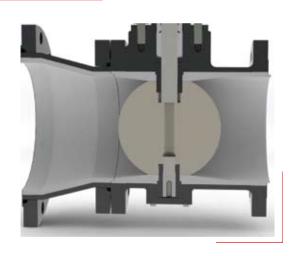
Venturi Spool Piece



The venturi spool piece controls the flow on the discharge side of the valves. This creates an almost laminar flow on the discharge of the venturi. The venturi creates a stilling chamber after the valve, reducing wear and increasing back preasure. Correct size gaskets will be factory fitted.

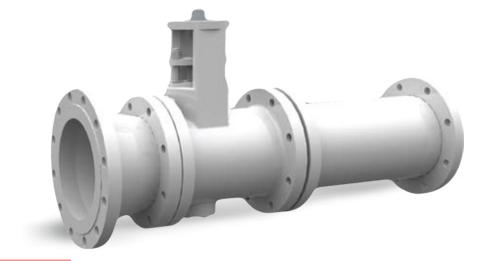
Inlet Reducer

The inlet reducer works together with the principle of using smaller S-CON valve compared the pipeline size. This will assist in achieving the most optimum valve control range, which is 25°-65° open. Correct size gaskets will be factory fitted.



Complete Valve Train Assembly

All S-CON valves and options can be factory fitted and supplied as turnkey assemblies. This will significantly reduce plant downtimes and installation times. Standard or plant specific options can also be supplied. Correct size gaskets will be factory fitted.



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