Lewis® Sulphuric Acid Valves

Butterfly Acid Valve

Technical Specifications



Minerals



Manufactured in St. Louis, MO, USA since 1891, our Lewis® range of pumps, valves and alloys are a trusted partner in the sulphur, sulphuric acid and phosphoric acid industries.

Our Lewis® range of products includes pumps, valves and alloys, including the family of Lewmet® alloys. These specialty alloys are designed to specifically provide superior erosion resistance combined with outstanding corrosion protection in the operating environment of contact process sulphuric acid producing plants

Ideally suited for throttling service in high concentration hot sulphuric acid

Lewis® butterfly acid valves are designed with an all-metal construction featuring Lewmet® nickel chrome alloys. The overall corrosion resistance of Lewmet® alloys to hot sulphuric acid allows for consistently reliable control, even in the severe service applications such as acid heat exchanger/cooler bypass duty, at pump discharge (intermediate and final absorption tower).

The all-metal Lewmet® alloy design of Lewis® butterfly acid valves eliminates failures typically associated with non-metallic lined valves in sulphuric acid service such as brick chip/tower packing damage as well as separation from substrate material.

Lewis® acid valves can be furnished with a variety of automatic actuators for either electric motorised operation or pneumatic operation. Actuators are assembled to the valves by valve technicians during manufacturing and fully calibrated before shipment.



Lewis® valves featuring Lewmet® alloy are designed to provide unequaled performance in sulphuric acid plant operations.

Design Features

- All-metal construction for extended wear life
- Resistant to galling, erosion and corrosion for consistent flow control
- Insensitive to turbulence and abrasion
- A variety of automatic actuator options available
- Velocity resistance of Lewmet® alloys allows the piping engineer the flexibility to downsize the valve to its most efficient and economic size

Design Standards

Drilled to ANSI, BS, DIN, or, JIS standards

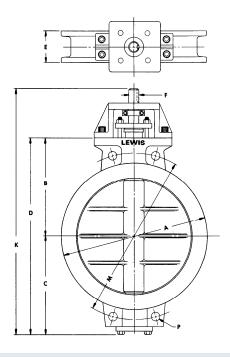
Specifications

Sizes 100-600mm (4"-24")

Temperature up to 140°C (280°F) Heat recovery up to 240°C (460°F)

Materials

Lewmet® alloy and stainless steel



Lewis® Butterfly Acid Valve Dimensions																							
SIZE		Α		В		С		D		Е		F		K		ANSI IN		DIN MM		BS 10 IN		JIS 10 MM	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	М	Р	M	Р	M	Р	M	Р
4	100	6.00	152	4.75	121	4.13	105	8.88	225	2.13	54	0.63	16	14.25	362	7.50	0.75	180	19	7.00	0.75	175	19
6	150	8.13	207	6.00	152	6.25	159	12.25	311	2.25	57	0.75	19	18.38	467	9.50	0.88	240	23	9.25	0.75	240	23
8	200	10.50	267	7.25	184	7.13	181	14.38	365	2.50	64	1.00	25	20.38	518	11.75	0.88	295	23	11.50	0.75	290	23
10	250	12.50	318	8.50	216	9.13	232	17.63	448	2.81	71	1.00	25	23.63	600	14.25	1.00	350	23	14.00	0.88	355	25
12	300	14.50	368	10.00	254	10.13	257	20.13	511	3.19	81	1.00	25	26.13	664	17.00	1.00	400	23	16.00	0.88	400	25
14	350	16.50	419	11.25	286	11.13	283	22.38	568	3.13	80	1.25	32	28.38	721	18.75	1.13	460	23	18.50	1.00	445	25
16	400	18.50	470	12.25	311	12.63	321	24.88	632	3.25	83	1.25	32	30.88	784	21.25	1.13	515	27	20.50	1.00	510	27
18	450	20.75	527	14.50	368	16.75	425	31.25	794	4.13	105	1.25	32	38.75	984	22.75	1.25			23.00	1.00	565	27
20	500	22.75	578	16.00	406	18.25	464	34.25	870	4.50	114	1.25	32	41.75	1,060	25.00	1.25	620	28	25.25	1.00	620	27
24	600	27.00	686	18.38	467	20.63	524	39.00	990	5.00	127	1.88	48	47.50	1,207	29.50	1.38	725	31	29.75	1.13	730	33

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