

Scope of application

Explosion protection sliding valves belong to the active explosion protection system. They are used for the safe explosion decoupling of various plant components in which explosive dusts are processed, transported and stored and connected by pipelines.

Protection against secondary explosions

To avoid secondary explosions, connected plant components must be protected against flame and pressure transmission in the event of an explosion. The so-called quick-sliding valves are activated by solenoid valves. ATEX quick sliding valves are electropneumatically operated slide valves: Air flows from a compressed air reservoir into a drive cylinder and closes the slider within milliseconds. This effectively stops both flame and pressure propagation. After triggering, the slide valve can usually be reactivated after a brief check and can be validated at any time thanks to its non-destructive mode of operation.

Exemplary fields of application:

The explosion protection valves are used wherever explosive media are conveyed through pipelines. A major area of application is the conveying of products with high loads, such as in grinding plants, large vacuum cleaners or silo filling lines.

Mounting position:

Installation is possible in various mounting positions, the housing is gas-tight and vacuum-tight to the exterior.

Tailor-made safety

The quick-closing slides are equipped with a pressure accumulator. This ensures that they remain operational even in the event of a compressed air failure. Additional solenoid valves simplify maintenance. They allow slow opening or closing of the slide. After a false activation, the quick-closing slide valve is fully functional again in a few seconds without any repair work.

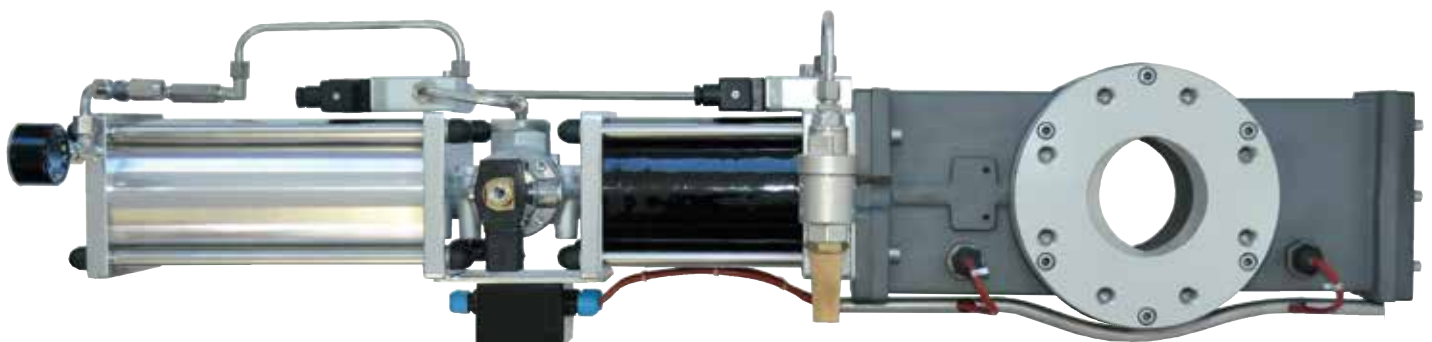
Advantages:

- No flow losses due to free nominal diameter
- No repairs after a release
- Also suitable for high pressure levels
- Effective for explosions from both directions
- Can also be used with high dust loads
- Validation by measuring closing times possible at any time

Certified according to
ATEX 2014/34 EU + DGRL

Options

- Design of electrical equipment for use in explosion-hazardous areas
- Stainless steel through passage
- Complete design in stainless steel
- Hygienic design





Propulsive medium

Compressed air from the factory compressed air network with an operating pressure of 6 bar

Connecting flanges

according to DIN 2526 Form A, PN 10

Materials

- Valve housing made of high-quality cast aluminium alloy
- Sliding blade made of stainless steel
- Drive cylinder made of GFRP
- Compressed air accumulators, connection, switching and control elements made of aluminium or stainless steel
- PTFE and NBR gaskets
- other materials available on request

Shut-off times

depending on the nominal diameter < 40 ms

Compressive strength

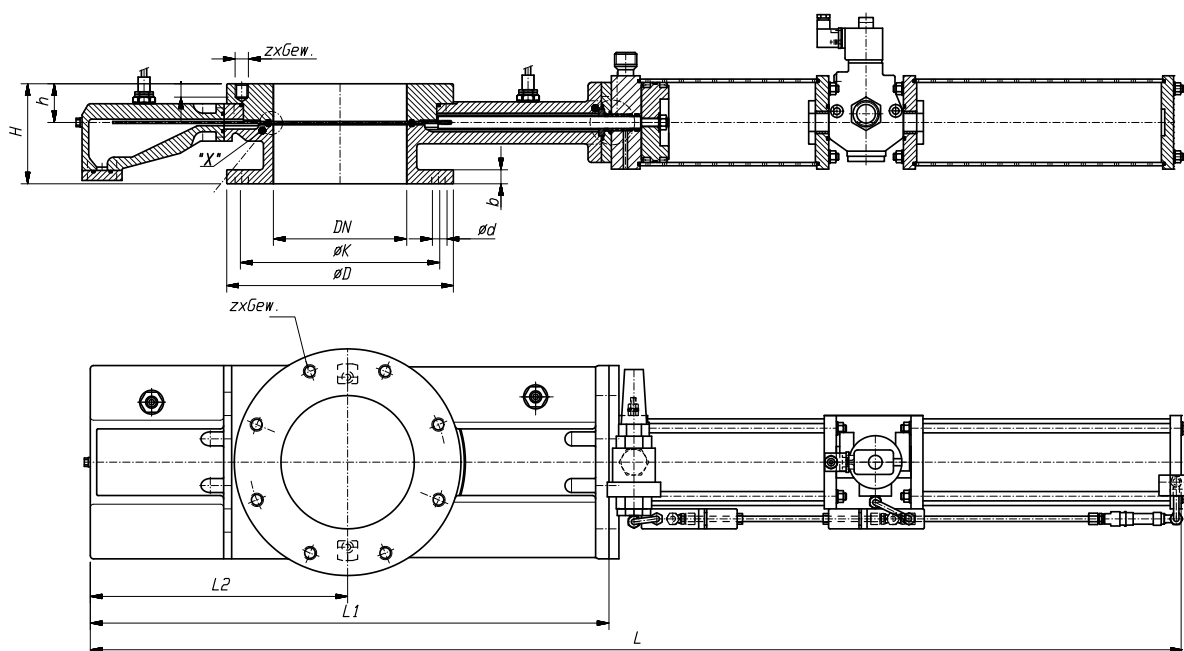
10 bar overpressure, max. 19,6 bar

Ambient temperature

from -10°C to +40°C

Product temperature

von -20°C bis +100°C



DN	overall length			overall height		Flange ø D	Flange thickness b	Connection dimensions (drilled according to PN10)			Determined closing time in ms (deviations from +/- 0.2 to 2 possible)	Weight in kg (for silumin)
	L	L1	L2	H	h			ø d	Z x Gew	ø K		
50	734	327	147	120	53	165	18	18	4xM16	125	23,4	22
65	806	364	174	120	53	185	18	18	4xM16	145	23,4	24
80	945	437	223	120	53	200	16	18	8xM16	160	24	26
100	1123	472	230	120	53	220	17	18	8xM16	180	24,8	30
125	1240	576	286	150	53	270	20	18	8xM16	210	40,1	34
150	1365	626	307	120	53	285	19	22	8xM20	240	27,7	38
200	1640	791	384	150	58	340	21	22	8xM20	295	35,1	50
250	2220	1026	492	180	65	425	23	22	12xM20	350	30,7+/-0,3	202
300	2515	1172	552	180	65	485	23	22	12xM20	400	<50	270
400	3115	1600	800	200	77	580	25	26	16xM24	515	<50	360