

Quick Sliding Valve (DN50–DN200)

Technical Data

Application

Protection of plants and devices for transport or processing of dusts of dust explosion classes St 1 and St 2. Applications in dust explosion class St 3 or with hybrid mixtures require manufacturer approval.

Closing Times

< 40 ms, dependant on nominal diameter

Compressive Strength

max. 10 bar (g)

Ambient Temperatures

-10°C–+40°C

Product Temperature

-20°C–+100°C

Actuator Medium

pressurised air from the on-site air pressure network with a max. operating pressure of 6 bar.

Connecting Flanges

bored as per DIN 2526 Form A, PN 10

Materials

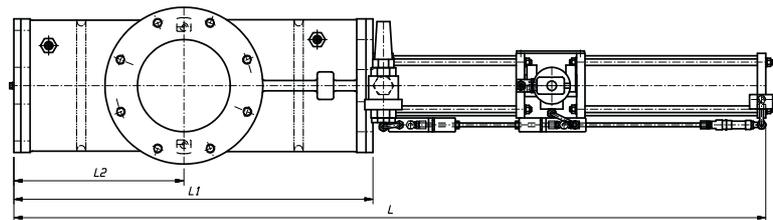
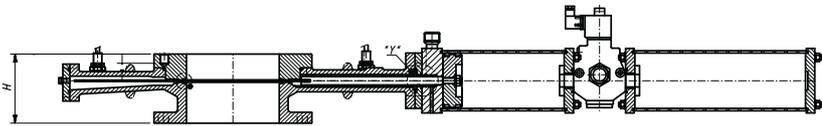
- valve body from high grade aluminium alloy, or GGG 40.3
- sliding knife from stainless steel
- drive cylinder from GFK
- pressure reservoir, connecting, switch, and control elements from aluminium or stainless steel
- gaskets from PTFE or NBR

Assembly Direction

with drive cylinder lying horizontally or hanging downward

Options

- with electrical devices, suitable for operation in Ex areas
- with passage from stainless steel
- with PTFE inliner
- pharma design
- valve body from stainless steel



Nominal Diameter	L (mm)	L1 (mm)	L2 (mm)	H (mm)	Weight (kg)
DN 50	734	147	587	120	20
DN 65	806	174	632	120	22
DN 80	945	223	722	120	24
DN 100	1123	230	893	120	28
DN 125	1245	286	959	150	34
DN 150	1365	307	1058	120	35
DN 200	1640	384	1156	120	50

Functionality

The Quick Sliding Valve is triggered via specially designed detection and control systems.

Immediately after an explosion is detected, a quick acting solenoid valve is activated, and a piston is charged with an amount of pressurised air, stored in the Quick Sliding Valve. The Quick Sliding Valve closes almost without delay.

The pressure reservoir is re-filled immediately and forcedly from the on-site air pressure network, enabling the immediate usability of the Quick Sliding Valve without any further effort.

Via two additional solenoid valves, the Quick Sliding Valve may be driven slowly into closed and open position (e.g. for test purposes) at any time by the push of a button. This does not only enable a qualified information about the functionality of the Quick Slide Valve, but also provides the opportunity to integrate the Quick Sliding Valve into the work process up to a certain degree.

The specially designed sliding knife guarantees the sealing of the conveying system in open and in closed position, even to external areas, and no additional sealing elements are required.

Connecting Box

Degree of protection: IP 54