

Pneumatic Edge Sensor SK 78

This edge sensor has been designed for the mechanical detection of belt edges. An integrated spiral spring ensures adequate contact pressure.

Different sensor paddles are available to suit the various belt conditions.

For web guiding applications the sensor is used in combination with felt or wire guiding systems ELGUIDE.



Function

Edge sensor SK 78 is purely pneumatic, its operation is based on the rotary piston principle. A rotary piston opens the air supply to the respective cylinder chamber proportionally to the position of the sensor paddle. At the same time the venting passage to the opposite cylinder chamber is opened.

The valve is completely closed when in the mid-way position. In this case air is required for the positioning movements only.

Proportional return

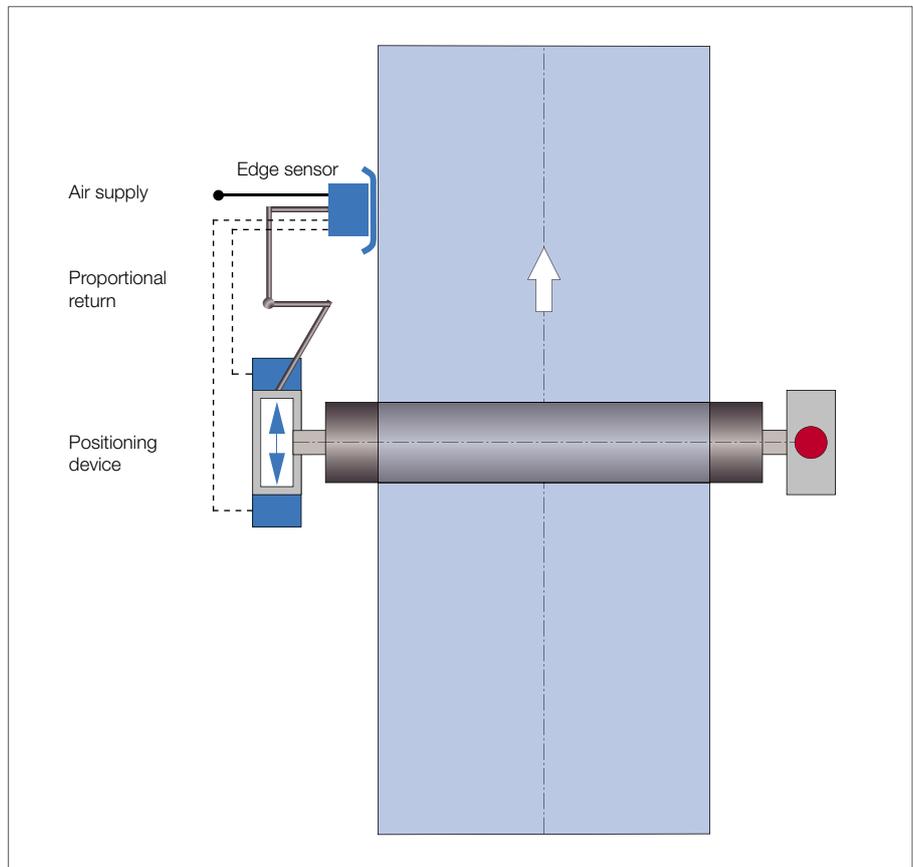
Edge sensors SK 78 are used in combination with a mechanical return element only (proportional return). This return guarantees perfect belt guiding as the positioning movement is directly related to the extent of the deviation. This in turn ensures a stable control loop without constant dispositions to hunting.

Use

The sensors are used on clothings in paper, board and tissue machines as well as with other circulating belts.

Application

The edge sensor should always be mounted downstream of the positioning device and in the direction of the belt run. If at all possible the sensor paddle should be mounted standing.



Technical data SK 78

Air pressure	2,5 to 3,5 bar
Air treatment	air dewatered, filtered and oiled
Contact pressure	about 2 N
Dead zone	±7,5 mm
Ambient temperature	+10 °C to +150 °C
Material	
wet area	bronze, stainless steel
dry area	brass nickel-plated, stainless steel
Dimensions	see dimensioned drawing

Subject to technical modifications without notice

Selection table	
SK 7800	paddle made of stainless steel for dry and wet applications
	paddle made of stainless steel, with ceramic plate for dry and wet applications
	paddle made of stainless steel, with plastic plate (Etralon) for dry and wet applications
SK 7805	sensing roll for wet and dry areas