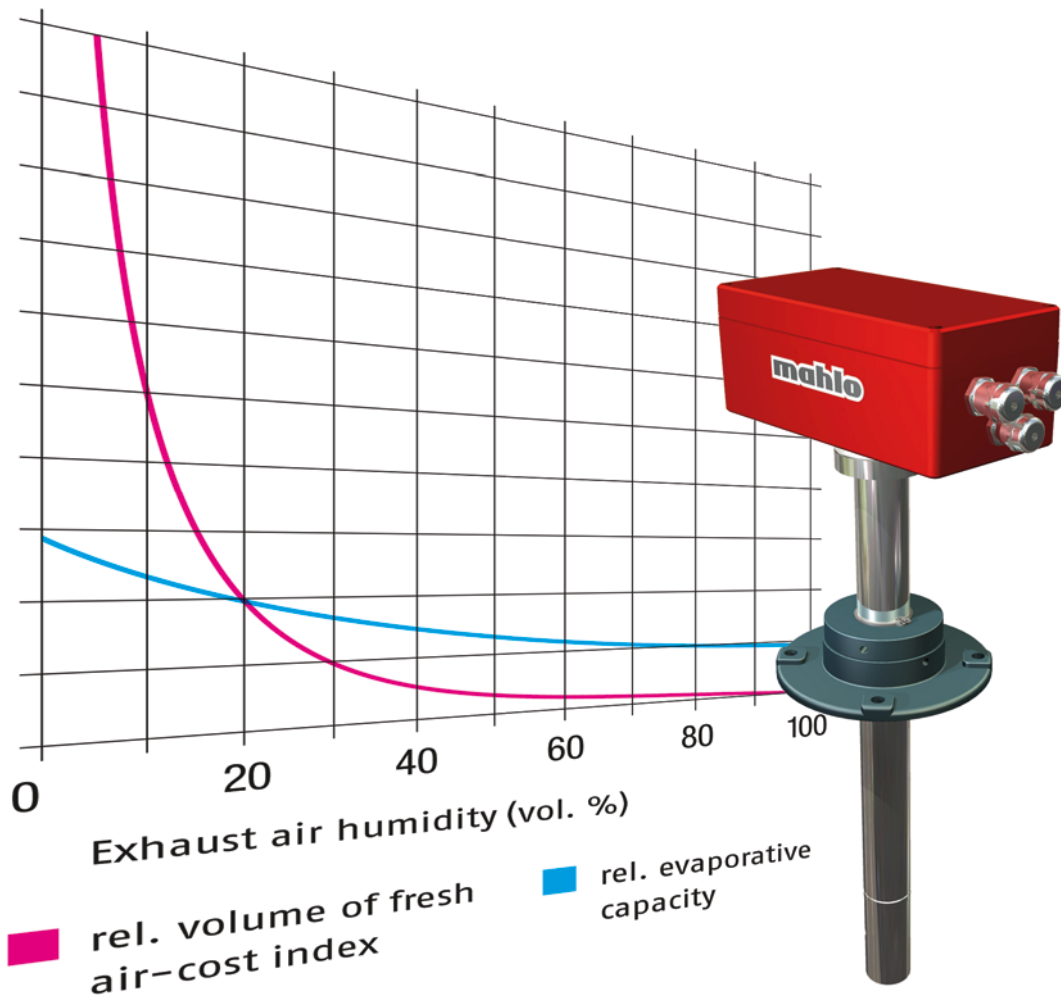


# HUMIDITY SENSOR ZS-12

Exhaust air moisture up – Energy down!



HUMIDITY SENSOR ZS-12

## EXHAUST AIR MOISTURE CONTROL



TEXTILE



NONWOVEN



COATING &  
CONVERTING



PAPER



EXTRUSION

# HUMIDITY SENSOR ZS-12

EXHAUST AIR MOISTURE UP – ENERGY DOWN!



Much unused energy is wasted through the exhaust air during drying processes without appropriate control. The humidity sensor ZS-12 adapts the heating energy to the actual demand by monitoring the vapour content of the exhaust air and then controls this factor through the fan speed or the exhaust air vent control.

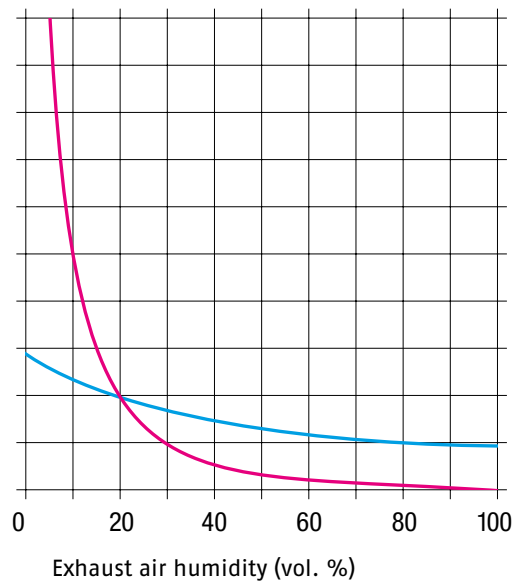
- The energy demand is reduced by the controlled heating demand.
- The constant conditions produced by the control increase the reproducibility of the production process and the product quality.

### Product-highlights

- ✓ Non-contact measurement of product temperature
- ✓ High-temperature proof sensors
- ✓ Low maintenance requirements
- ✓ Easy to install
- ✓ Self-cleaning sensors

### Customer benefits

- ✓ Maximum repeatability
- ✓ Optimal utilisation of stenter capacity
- ✓ Low energy consumption per meter of product
- ✓ Ultra-reliable processing
- ✓ Short payback times
- ✓ Elimination of safety margins



■ rel. volume of fresh air-cost index    ■ rel. evaporative capacity

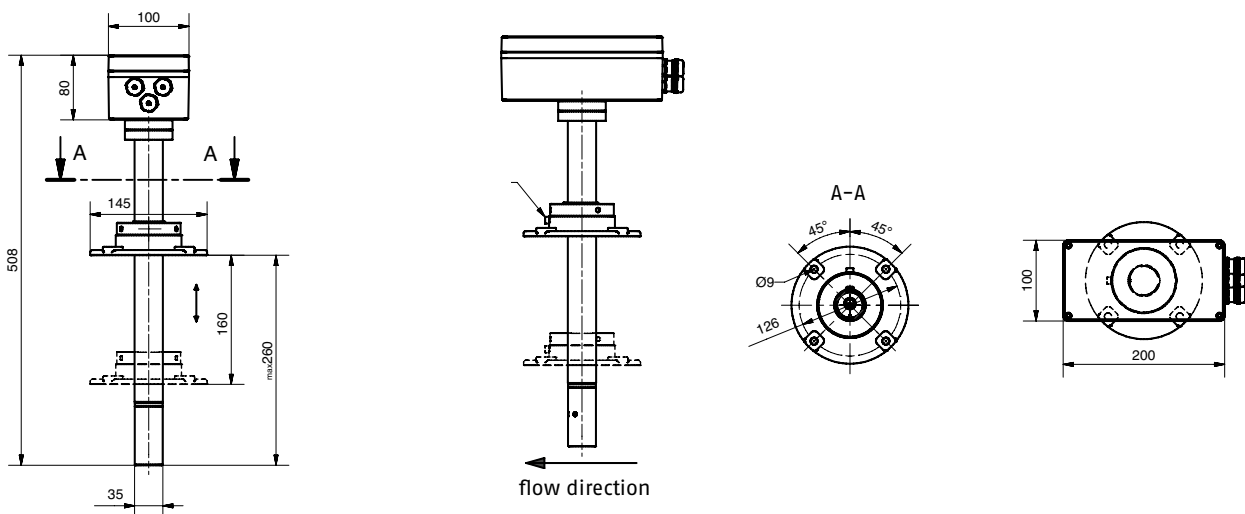
### Maximising the exhaust air moisture from 8 to 15 vol. % results in

- reduction of energy consumption by 23 %
- reduction of production costs by 6 %
- maintaining a consistent production speed.

Prerequisite: Working time 240 days/at 3 shifts; product weight: 150 g/m<sup>2</sup>; product width: 1.6 m; initial moisture: 75 %; residual moisture: 4 %; product speed: 100 m/min; fresh air: 25 °C; exhaust air: 160 °C

Sensor	Humidity Sensor ZS-12			
Measuring range	H <sub>2</sub> O 30/50/100 Vol. %; 266/622/1000 g/kg;			
Accuracy	≤ 2 Vol. % of maximum scale reading			
Sensor ports	0-20 mA, 4-20 mA			
Max. working temperature	Sensor controller:	0...+65 °C	Sensor:	0...+ 250 °C
Power supply	24 V DC, 0,5 A; 24 V AC, 0,7 A			
Connection	3 EMC cable glands M16 x 1,5, with shield clamping range, protection class IP 67			
Sound pressure level	< 70 dB (A)			
Mechanical data	Sensor	Sensor controller		
Construction	Stainless-steel stem	Die-cast aluminium casing		
Proofing standards	Against measured gases only!	IP 67		
Weight	28 N (~ 2,8 kg)			

### Dimensions



Humidity Sensor ZS-12  
91-015470-01

Monitoring and control systems, automation:

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#### **Mahlo GmbH + Co. KG Germany**

Donaustr. 12, 93342 Saal/Donau  
Telephone: +49-9441-601-0  
Fax: +49-9441-601-102  
Email: [info@mahlo.com](mailto:info@mahlo.com)

#### **Mahlo Italia S.R.L. Italy**

Via Fiume 62, 21020 Daverio  
Telephone: +39-0332-94-95-58  
Fax: +39-0332-94-85-86  
Email: [mahlo.italia@mahlo.com](mailto:mahlo.italia@mahlo.com)

#### **Mahlo America Inc. USA**

P.O. Box 2825, Spartanburg, S.C. 29304  
Telephone: +1-864-576-62-88  
Fax: +1-864-576-00-09  
Email: [mahlo.america@mahlo.com](mailto:mahlo.america@mahlo.com)

#### **Mahlo Ouest S.P.R.L. Belgium**

Quartum Center  
Hütte 79 - Bte 10  
4700 Eupen  
Telephone: +32-87-59-69-00  
Fax: +32-87-59-69-09  
Email: [mahlo.ouest@mahlo.com](mailto:mahlo.ouest@mahlo.com)

#### **Mahlo España S.L. Spain**

Calle Luxemburgo nº 4  
08303 Mataro (Barcelona)  
Telephone: +34-938-640-549  
Email: [mahlo.espana@mahlo.com](mailto:mahlo.espana@mahlo.com)

**WWW.MAHLO.COM**

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