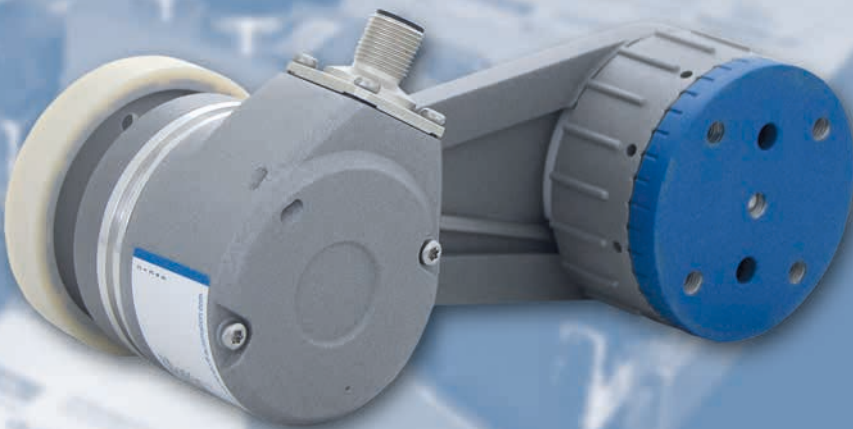
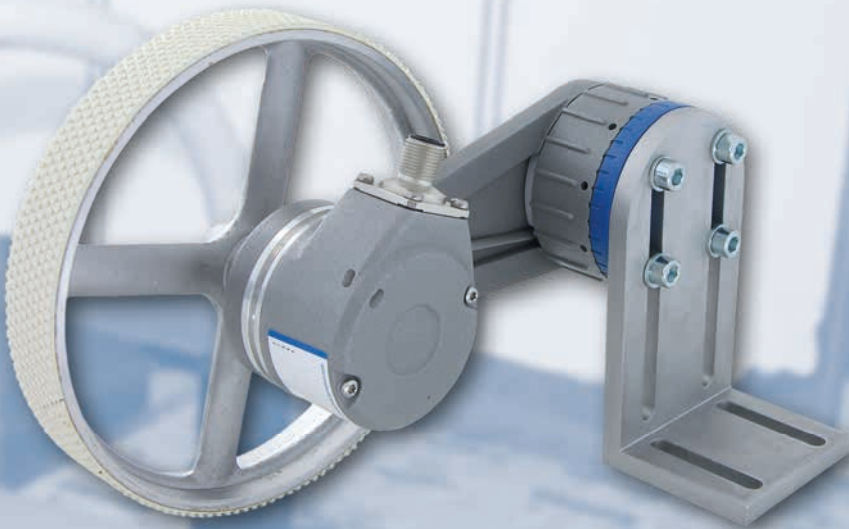


**WACHENDORFF**

Automation GmbH & Co. KG

# Precise positioning with the LMS MA

- Space-saving and reliable complete system for position, speed and length
- Up to 0.008 mm/pulse for excellent measurement results
- Suitable for any surface
- Quickly mounted and adjusted



**IndustrieROBUST**



## Positions, speeds, travel lengths ... measure reliably and precisely

For over 25 years, Wachendorff Automation has developed and manufactured systems and rotary encoders for worldwide use in the areas of mechanical and plant construction, lift construction, mobile machinery and renewable energies.

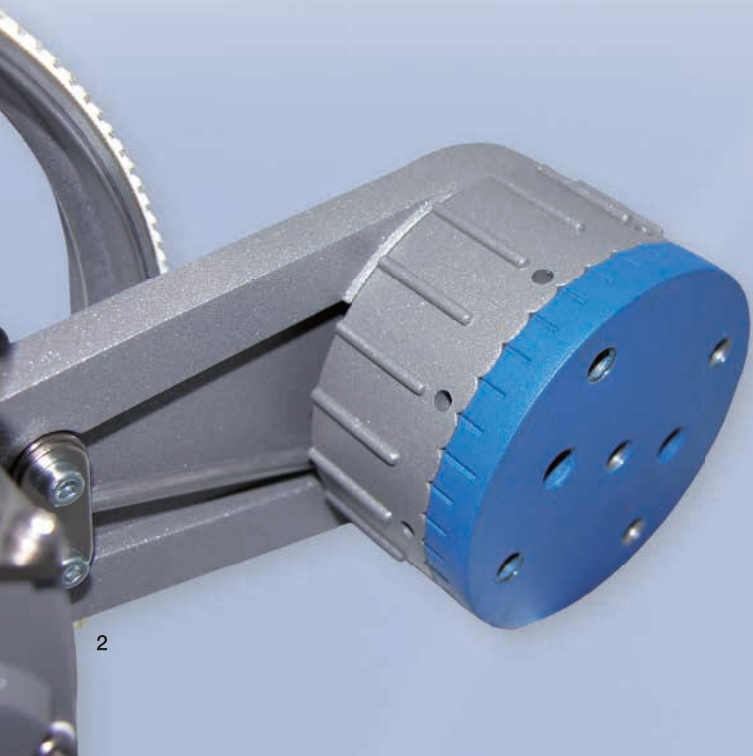
More than 1,500 realised customer variants demonstrate our flexibility and absolute focus on the customer's needs. Owing to the high mechanical and electrical stability of our rotary encoders and systems, we provide a five-year warranty – which is unique in the world!

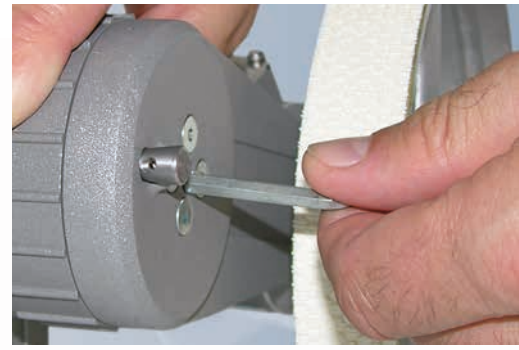
We support you right from the construction phase. Our strength lies in precisely matched lengths and position measuring systems for your measurement task.

With these systems, the positions, speeds and travel lengths of conveyor belts, film/paper webs or cardboard packaging, for example, can be recorded safely and efficiently.

We meet the highest requirements in an ideal way with the LMSMA2x/3x measuring systems:

- Constant and accurate measurement results through optimal, low-slip measurement in the most varied conditions arising from:
  - Adjustable pressure
  - Coordinated measuring wheels for every surface
  - Selectable resolutions from 1.0 to 0.008 mm/pulse.
- Small space requirement thanks to its compact design.
- Long service lifetimes thanks to the high mechanical robustness of all the components.
- Fast and flexible mounting on the machine.





## Experience is in the detail ... save time with a system

We have significantly optimised the adjustment possibilities of the whole system, which is based on a spring arm with a central spring. This gives you constructive and valuable benefits:

### Now 36 alignment positions

The newly developed hand wheel with its 10° resolution levels allows for 36 alignment positions. In combination with the elongated holes of the angle bracket, you get much more room for the installation.

### Easily adjustable preload

With the new systems, the spring preload is adjustable in steps from 5 N to a maximum of 30 N preload.

### Calibration without disassembly

The preassembled systems for installation in the machine or readjustment during commissioning remain mounted.

### Fixation in resting position

During machine setup or maintenance in particular, it is possible that the length measuring system is not designed to run. The LMSMA systems offer the possibility to fix the spring arm in a resting position. The spring arm is then returned to the working position and continues to work at the previously set pressure.

You will see that there are a number of good reasons for using the LMSMA length measuring systems.





## Quickly mounted – directly on the machine ... the LMSMA2x length measuring system

To assemble, simply loosen the base plate from the hand wheel and attach it to the machine at the position defined by you. The dimensions of the holes in the blue base plate are adapted to the current attachment profiles on the market. The captive central screw enables the measuring system to connect to the base plate. Now simply adjust the preload and tighten the central screw. Job done!

Special spring for durable uniform spring force

Incremental Encoder WDG158,  
extremely robust due to high bearing loads

Base plate with adjustable resolution and holes,  
matched for profile rail mounting or directly on  
the machine

Hand wheel with catch positions for the  
adjustment of the contact pressure

Measuring wheels with different surfaces for  
ideal adaptation to the measuring surface

Captive central screw for  
fast installation and setup

Locking pin to determine the resting position  
during setup or maintenance



**LMSMA22 length measuring system (measuring wheel U = 200 mm / without angle bracket)**



LMSMA22100024KH10  
 LMSMA22100005KH10  
 LMSMA22100024KG10  
 LMSMA22100005KG10  
 LMSMA22100024NG10  
 LMSMA22010005NG10  
 LMSMA22010024KH10  
 LMSMA22010005KH10  
 LMSMA22010024KG10  
 LMSMA22010005KG10  
 LMSMA22010024NG10  
 LMSMA22004005NG10  
 LMSMA22004024KH10  
 LMSMA22004005KH10  
 LMSMA22004024KG10  
 LMSMA22004005KG10  
 LMSMA22000824NG10  
 LMSMA22000805NG10  
 LMSMA22000824KH10  
 LMSMA22000805KH10  
 LMSMA22000824KG10  
 LMSMA22000805KG10

mm/pulses	Pulses	LMSMA221000						LMSMA220100						LMSMA220040						LMSMA220008					
1.0	200	•	•	•	•	•	•																		
0.1	2000							•	•	•	•	•	•												
0.04	5000													•	•	•	•	•	•						
0.008	25000																			•	•	•	•	•	•
<b>VDC</b>																									
10 up to 30 HTL		•		•		•		•		•		•		•		•		•		•		•		•	
4.75 up to 5.5 TTL			•		•		•		•		•		•		•		•		•		•		•		•
Range of appl.*		1	1	2	2	3	3	1	1	2	2	3	3	1	1	2	2	3	3	1	1	2	2	3	3

[www.wachendorff-automation.com/lmsma22](http://www.wachendorff-automation.com/lmsma22)

**LMSMA25 length measuring system (measuring wheel U = 500 mm / without angle bracket)**



LMSMA25100024KH10  
 LMSMA25100005KH10  
 LMSMA25100024KG10  
 LMSMA25100005KG10  
 LMSMA25100024NG10  
 LMSMA25010005NG10  
 LMSMA25010024KH10  
 LMSMA25010005KH10  
 LMSMA25010024KG10  
 LMSMA25010005KG10  
 LMSMA25010024NG10  
 LMSMA25004005NG10  
 LMSMA25004024KH10  
 LMSMA25004005KH10  
 LMSMA25004024KG10  
 LMSMA25004005KG10  
 LMSMA25000824NG10  
 LMSMA25000805NG10  
 LMSMA25000824KH10  
 LMSMA25000805KH10  
 LMSMA25000824KG10  
 LMSMA25000805KG10

mm/pulses	Pulses	LMSMA251000						LMSMA250100						LMSMA250040						LMSMA250008					
1,0	500	•	•	•	•	•	•																		
0.1	5000							•	•	•	•	•	•												
0.04	12500													•	•	•	•	•	•						
0.02	25000																			•	•	•	•	•	•
<b>VDC</b>																									
10 up to 30 HTL		•		•		•		•		•		•		•		•		•		•		•		•	
4.75 up to 5.5 TTL			•		•		•		•		•		•		•		•		•		•		•		•
Range of appl.*		1	1	2	2	3	3	1	1	2	2	3	3	1	1	2	2	3	3	1	1	2	2	3	3

[www.wachendorff-automation.com/lmsma25](http://www.wachendorff-automation.com/lmsma25)

**Range of application of the measuring wheels U = 200 mm / 500 mm**

	*1	*2	*3
Measuring wheel			
Systems	LMSxxxKH	LMSxxxKG	LMSxxxNG
Range of appl.	Plastic, painted surfaces, paper, paste-board, wood, metal, textiles.	Plastic, painted surfaces, paper, paste-board, wood, metal, textiles.	Textiles.

Does your application require other resolutions or pulse counts, measuring wheels, cable lengths or other accessories? Contact us. We are happy to help you find the optimal solution.

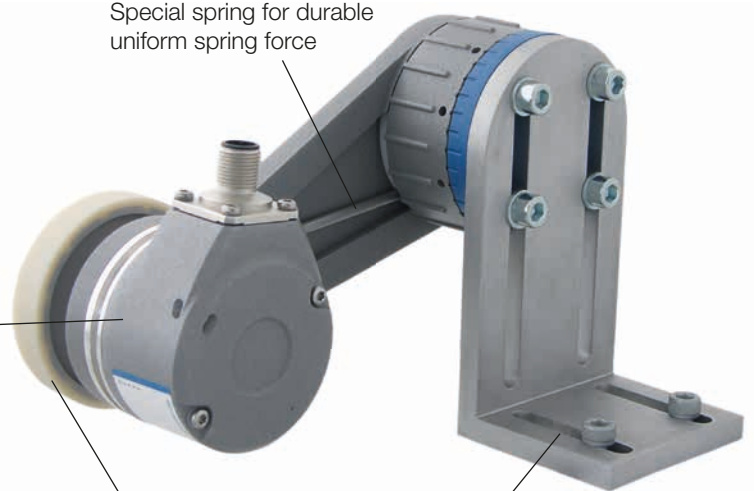


## Easily mountable – with pre-assembled angle ... the LMSMA3x length measuring system

If direct mounting is not possible at the plant, we have a solution for it. Varied mounting positions are possible with the highly variable orientable angle bracket and the 36 locking positions of the hand wheel.

Special spring for durable uniform spring force

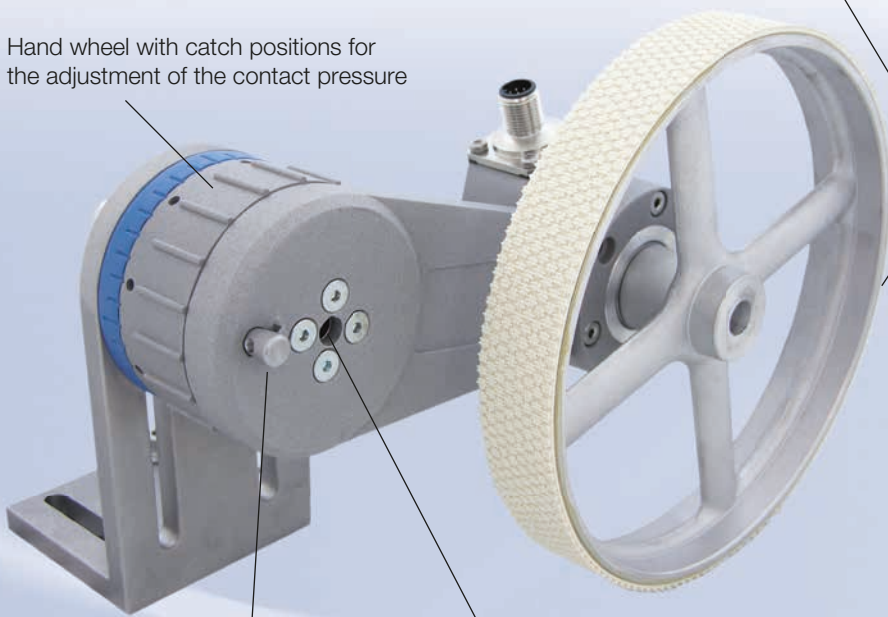
Incremental Encoder WDG158, extremely robust due to high bearing loads



Angle bracket with elongated holes for any installation on the plant, pre-assembled at the pivot point of the measuring system

Hand wheel with catch positions for the adjustment of the contact pressure

Measuring wheels with different surfaces for ideal adaptation to the measuring surface



Locking pin to determine the resting position during setup or maintenance

Captive central screw for fast installation and setup



**LMSMA32 length measuring system (measuring wheel U = 200 mm / with angle bracket)**



LMSMA32100024KH10  
 LMSMA32100005KH10  
 LMSMA32100024KG10  
 LMSMA32100005KG10  
 LMSMA32010024NG10  
 LMSMA32010005NG10  
 LMSMA32010024KH10  
 LMSMA32010005KH10  
 LMSMA32010024KG10  
 LMSMA32010005KG10  
 LMSMA32004024NG10  
 LMSMA32004005NG10  
 LMSMA32004024KH10  
 LMSMA32004005KH10  
 LMSMA32004024KG10  
 LMSMA32004005KG10  
 LMSMA32000824NG10  
 LMSMA32000805NG10  
 LMSMA32000824KH10  
 LMSMA32000805KH10  
 LMSMA32000824KG10  
 LMSMA32000805KG10

mm/pulses	Pulses	LMSMA321000						LMSMA320100						LMSMA320040						LMSMA320008					
1.0	200	•	•	•	•	•	•																		
0.1	2000							•	•	•	•	•	•												
0.04	5000													•	•	•	•	•	•						
0.008	25000																			•	•	•	•	•	•
<b>VDC</b>																									
10 up to 30 HTL		•		•		•		•		•		•		•		•		•		•		•		•	
4.75 up to 5.5 TTL			•		•		•		•		•		•		•		•		•		•		•		•
<b>Range of appl.*</b>		1	1	2	2	3	3	1	1	2	2	3	3	1	1	2	2	3	3	1	1	2	2	3	3

[www.wachendorff-automation.com/lmsma32](http://www.wachendorff-automation.com/lmsma32)

**LMSMA35 length measuring system (measuring wheel U = 500 mm / with angle bracket)**



LMSMA35100024KH10  
 LMSMA35100005KH10  
 LMSMA35100024KG10  
 LMSMA35100005KG10  
 LMSMA35010024NG10  
 LMSMA35010005NG10  
 LMSMA35010024KH10  
 LMSMA35010005KH10  
 LMSMA35010024KG10  
 LMSMA35010005KG10  
 LMSMA35004024NG10  
 LMSMA35004005NG10  
 LMSMA35004024KH10  
 LMSMA35004005KH10  
 LMSMA35004024KG10  
 LMSMA35004005KG10  
 LMSMA35002024NG10  
 LMSMA35002005NG10  
 LMSMA35002024KH10  
 LMSMA35002005KH10  
 LMSMA35002024KG10  
 LMSMA35002005KG10

mm/pulses	Pulses	LMSMA351000						LMSMA350100						LMSMA350040						LMSMA350020					
1.0	500	•	•	•	•	•	•																		
0.1	5000							•	•	•	•	•	•												
0.04	12500													•	•	•	•	•	•						
0.02	25000																			•	•	•	•	•	•
<b>VDC</b>																									
10 up to 30 HTL		•		•		•		•		•		•		•		•		•		•		•		•	
4.75 up to 5.5 TTL			•		•		•		•		•		•		•		•		•		•		•		•
<b>Range of appl.*</b>		1	1	2	2	3	3	1	1	2	2	3	3	1	1	2	2	3	3	1	1	2	2	3	3

[www.wachendorff-automation.com/lmsma35](http://www.wachendorff-automation.com/lmsma35)

**Range of application of the measuring wheels U = 200 mm / 500 mm**

	*1	*2	*3
<b>Measuring wheel</b>			
<b>System</b>	LMSxxxKH	LMSxxxKG	LMSxxxNG
<b>Range of appl.</b>	Cardboard, wood, soft plastics, textiles, leather, paper, wire, steel sections, greased metals and painted surfaces.	Cardboard, wood, soft plastics, textiles, rubber.	Cardboard, wood, plastics, coarse textiles, carpet, cable measurement, fleece, paper.

Does your application require other resolutions or pulse counts, measuring wheels, cable lengths or other accessories? Contact us. We are happy to help you find the optimal solution.

# automation.com

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## The Wachendorff Group

- Delighted customers
- Corporate responsibility
- Attractive for good employees
- Outstanding quality
- Technology leader
- Environmental protection
- Profitable growth

We are a medium-sized owner-managed corporate group based in the beautiful Rheingau district, situated to the west of Wiesbaden.

Competent, personal, face-to-face advice and long-term collaboration with our business partners are the cornerstones of our continual growth. We are certified according to DIN ISO 9001:2015.

### Wachendorff Automation GmbH & Co. KG

The development and manufacturing of rotary encoders, engine feedback devices and complete measuring systems for use in a wide range of serial production applications in mechanical and plant engineering. An extensive standard range featuring numerous options and efficient development of customised solutions.

### Wachendorff Prozesstechnik GmbH & Co. KG

A reliable supplier since 1978 of robust, high quality industrial devices for visualizing, communicating and processing data in the areas of mechanical, plant and building automation.



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