



Datasheet

Length measurement system LMSMA32

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Wachendorff Automation

... systems and encoders

- Complete systems
- Industrial rugged encoders to suit your application
- Standard range and customer versions
- Maximum permissible loads
- 48-hour express production
- Made in Germany
- Worldwide distributor network

Robust length measurement system LMSMA32



- Compact system with new spring-loaded arm, including WDGI 58B encoder and 200 mm measuring wheel
- Up to 0.008 mm/impulse for measurement results
- Suitable for many surfaces
- Absorbent mounting
- Contact pressure – easily adaptable by intelligent central adjustment
- Easy to dismantle through pre-assembled angle bracket

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Resolution WDGI 58B10 with

200 ppr:	1 pulse/mm = 1.0 mm/pulse
2000 ppr:	10 pulses/mm = 0.1 mm/pulse
5000 ppr:	25 pulses/mm = 0.04 mm/pulse
25000 ppr:	125 pulses/mm = 0.008 mm/pulse

Mechanical Data of the system modules

Housing encoder

Flange	clamping flange
Flange material	aluminium
Housing cap	die cast aluminum, powder coated

Shaft(s)

Shaft material	stainless steel
Starting torque	approx. 1 Ncm at ambient temperature

Shaft	Ø 10 mm shaft with flat
Shaft length	L: 20 mm
Max. permissible shaft loading radial	220 N
Max. permissible shaft loading axial	120 N

Bearings

Max. operating speed	8000 rpm
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Spring loaded arm

Adjustable prestressing force	0 N up to 30 N in steps of 5 N
Length of spring lever axis	120 mm
Material	die cast aluminum
Interlock	Spring loaded arm can be interlocked at 100° to start position
Contact pressure	adjustable, 10°-step equates 5 N pressure increase

Machinery Directive: basic data safety integrity level

MTTF _a	200 a
Mission time (T _M)	25 a
Nominal service life (L _{10h})	1 x 10 ¹¹ revs. at 20 % rated shaft load and 8000 rpm
Diagnostic coverage (DC)	0 %

Electrical Data

Power supply/	4.75 VDC up to 5.5 VDC: max. 100 mA
Current consumption	10 VDC up to 30 VDC: max. 100 mA
Output circuit	TTL, HTL
Channels	ABN and inverted signals
Load	max. 40 mA / channel
Circuit protection	10 VDC up to 30 VDC, HTL only

Accuracy

Phase offset	90° ± max. 7,5 % of the pulse length
pulse-/pause-ratio	50 % ± max. 7 %

General Data

Weight	approx. 1100 g
Connection	Connector radial
Protection rating (EN 60529)	IP67, shaft sealed to IP65

Operating temperature

LMSxxxKH:	-10 °C up to +70 °C
LMSxxxKG:	-10 °C up to +70 °C
LMSxxxNG:	-10 °C up to +50 °C

Range of application measuring wheel U = 200 mm



LMSxxxKH: (even) Plastic, painted surfaces, paper, paste-board, wood, metal, textiles.



LMSxxxKG: (fluted) Plastic, painted surfaces, paper, paste-board, wood, metal, textiles.



LMSxxxNG: (pimpled) Textiles.

More information

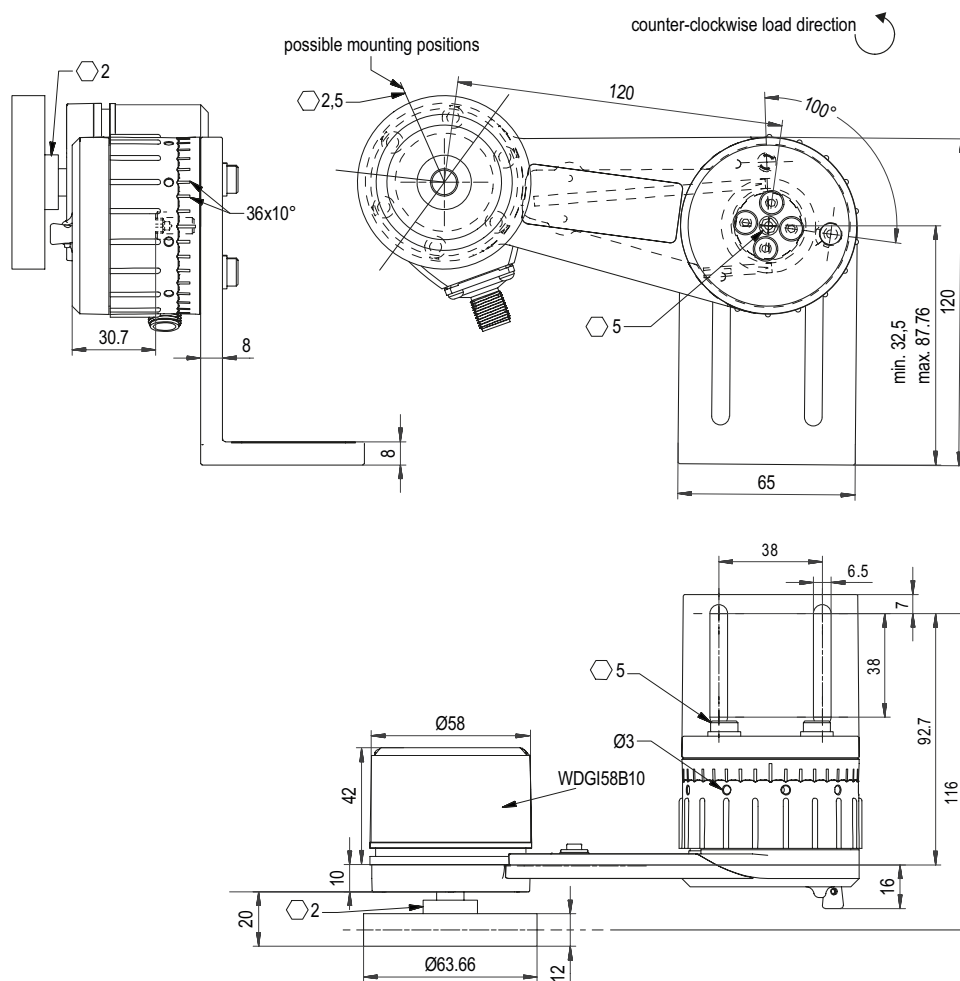
General technical data and safety incremental encoders

www.wachendorff-automation.com/gtd

Options

www.wachendorff-automation.com/acc

Sensor-connector (M12x1) SC, 8-pin



Description

SC8 radial, 8-pin, connector connected to encoder housing

Assignment	
	SC8
	8-pin
Circuit	F05, R05, F24, R24
GND	1
+UB	2
A	3
B	4
N	5
Light reserve warning	-
A inv.	6
B inv.	7
N inv.	8
n. c.	-
Shield	-



For further information please contact our local distributor.
Here you find a list of our distributors worldwide.
http://www.wachendorff-automation.com/distributors_worldwide.html



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