

Compact length measurement system LMS24



The Measuring system includes:

Encoder WDG24C, spring lever WDGFS10000 and measuring wheel MRD40GR06

Fields of application: Pasteboard, soft plastics, textiles, wood, rubber.

Encoder specifications

Pulses per revolution 1 ppr up to 128 ppr, 256 ppr, 512 ppr, 1024 ppr

Mechanical Data

Housing encoder:

- Synchro flange: Aluminium
- Cap: Aluminium
- Shaft Ø 6 mm
- Material: stainless steel

- Spring lever: Aluminium
- Measuring wheel: Aluminium, circumference = 125 mm

Spring travel at tension: 50 N \approx 6 mm

Max. operating speed: 12000 min⁻¹

Weight: ca. 100 g

Connections: cable or connector outlet

Protection rating IP65 all around with SK6/SK8, opt. IP67 all around (EN 60529): housing IP40 with K7, L7

Operating temperature: -20 °C up to +80 °C

Storage temperature: -20 °C up to +80 °C

Machinery Directive: basic data safety integrity level

MTTF_d: 200 a

Mission time (T_m): 25 a

Nominale service life 6.8 x 10¹¹ revs. at 12000 rpm and

(L_{10h}): 20 % rated shaft load

Diagnostic coverage (DC): 0 %

Electrical Data

Power supply/ 4,75 VDC up to 5,5 VDC: max. 40 mA

Open circuit current 5 VDC up to 30 VDC: max. 40 mA

consumption:

Output circuit: TTL, RS422 compatible, inv. TTL
HTL (TTL at 5 VDC)
HTL, inv. (TTL/RS422 comp. at 5 VDC)

Pulse frequency: TTL up to 64 I/U: max. 20 kHz
HTL up to 1024 I/U: max. 200 kHz

Channels: AB, ABN and inverted signals

Load: max. 30 mA / channel

Accuracy: Phase offset 90° \pm max. 25% of the period duration

pulse-/pause-ratio at
1 ppr up to 128 ppr: 50 % \pm max. 7 %
129 ppr - 256 ppr: 50 % \pm max. 9 %
257 ppr - 512 ppr: 50 % \pm max. 13 %
513 ppr - 1024 ppr: 50 % \pm max. 18 %

The measuring system includes:

- encoder WDG24C, measuring wheel and spring lever
- very compact construction for use in harsh conditions
- permissible bearing loads similar to our "big encoders"
- IP65 all around, optional IP67 all around with SK6/SK8
- hall effect based signal generation
- resolution up to 0,122 mm

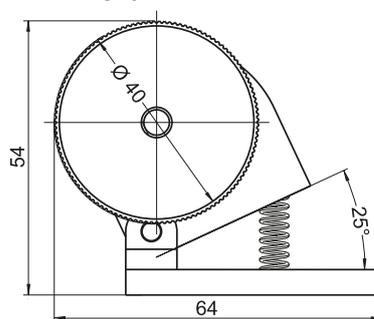
www.wachendorff-automation.com/lms24

Further technical information on:

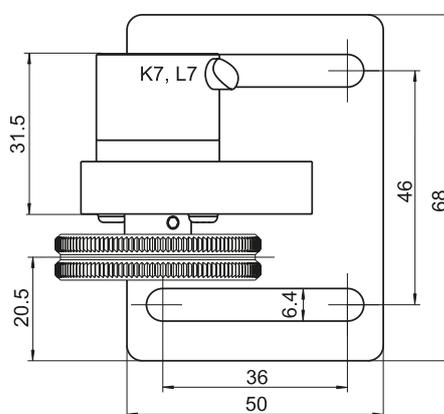
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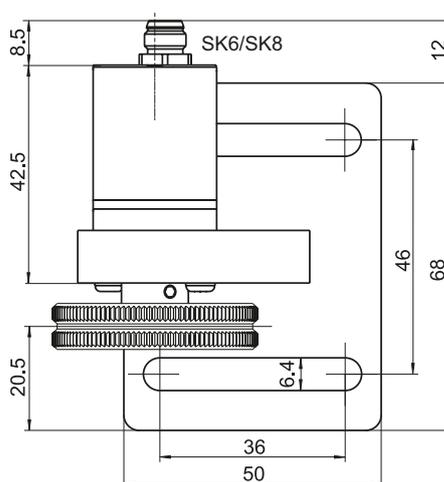
Measuring system LMS24



Measuring system LMS24 with cable (2 m) connection K7, L7



Measuring System LMS24 with connector SK6, SK8



All dimensional specifications in mm.

Optionen:

Cable length:

The encoder WDG 24C can also be supplied with more than 2m of cable. Please extend the standard order code with a 3 figure number, specifying the cable length in decimetre. The max. permissible cable length is 10 metres with the output circuit M05/N05. With output circuit M30/N30 max. 25 m.
Example: 3 m cable = 030

Examples for industrial counters:



Compact preset counter and tachometer CUB5

- 8 digit display
- 36 mm x 72 mm
- display of position, rotation-speed, flow-rate
- optional relays output cards

Further information at:

www.wachendorff-prozesstechnik.de/cub5

Further industrial counters:

www.wachendorff-prozesstechnik.de/emg

Customs tariff number: 90318020

Country of origin: Germany

Ordering information:

Output circuit:				
Resolution PPR	Power supply VDC	Output circuit	Light reserve warning	Order Key
max. 64	4,75 - 5,5	TTL, RS422 comp., inv.	-	M05
		TTL	-	N05
max. 1024	5 - 30	HTL inverted	-	M30
		HTL	-	N30

Channels: AB, ABN

Pulses per revolution ppr:
Output circuit M05 and N05: 16, 32, 64
Output circuit M30, N30: 1 up to 128, 256, 512, 1024

Order No.:

Example	WDG 24C	64	ABN	M30	K7	LMS	
Your system	WDG 24C					LMS	

Electrical connections:			ABN
Order key	Outgoing	Description	
cable: (Length 2 m standard)			
K7	radial	shield not connected	•
L7		shield connected to encoder housing	•
SK6	axial	connector 6-pin	-
SK8	axial	connector 8-pin	•

LMS = spring lever and measuring wheel

Optionen:
Empty = Without option
In decimetre = Cable length