Compact length measurement system LMS24

The Measuring system includes:
- encoder WDG24C, measuring wheel MRD40GR06
- very compact construction for use in harsh conditions
- permissible bearing loads similar to our "big encoders"
- IP65 all around, optional IP67 all around
- Hall effect based signal generation
- resolution up to 0.122 mm

www.wachendorff-automation.com/lms24

Further technical information on:
www.wachendorff-automation.com/gtd
Matching accessories on: www.wachendorff-automation.com/acs

**Encoder specifications**

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

**Measuring System LMS24**

**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 = 6 mm

Max. operating speed: 12000 min⁻¹
Weight: ca. 100 g
Connections: cable or connector outlet
Protection rating (EN 60529):
IP65 all around

Operating temperature: -40 °C up to +80 °C
Storage temperature: -40 °C up to +80 °C

**Machinery Directive:** basic data safety integrity level

MTTF, d: 200 a
Mission time (TJ): 25 a
Nominal service life (L10h): 6.8 x 10⁶ revs. at 12000 rpm and 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 consumption: 5 VDC up to 30 VDC: max. 40 mA
Output circuit: 10 VDC up to 30 VDC: max. 40 mA
Output circuit: TTL, RS422 compatible
Output circuit: HTL
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
Circuit protection: circuit type M24, N24 only
Accuracy: Phase offset at:
1 ppr up to 256 ppr: 90° max. ± 10 % of the pulse length
512 ppr:
90° max. ± 20 % of the pulse length
1024 ppr:
90° max. ± 23 % of the pulse length

Pulse-/pause-ratio at:
1 ppr up to 128 ppr: 50 % max. ± 10 %
256 ppr, 512 ppr, 1024 ppr:
50 % max. ± 20 %

All dimensional specifications in mm.

www.wachendorff-automation.com/gtd

Matching accessories on: www.wachendorff-automation.com/acs
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 and M24. With output circuit M30 max. 25 m.
Example: 3 m cable = 030

Examples for industrial counters:

C48C SERIES - 1/16 DIN counters
- LCD, 7 segment, 2 line 6 digit display
- display of counter value and batch or preset value at the same time

Further information at: www.wachendorff-prozesstechnik.de/c48c

Further industrial counters:
www.wachendorff-prozesstechnik.de/emg

Ordering information:

<table>
<thead>
<tr>
<th>Channels: AB, ABN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output circuit:</td>
</tr>
<tr>
<td>Resolution PPR</td>
</tr>
<tr>
<td>max. 64</td>
</tr>
<tr>
<td>max. 1024</td>
</tr>
<tr>
<td>max. 64</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Options: Empty = Without option
In decimetre = Cable length
LMS = spring lever and measuring wheel

Order No.: Example WDG 24C 64 ABN M24 K7 LMS
Your system WDG 24C

Output circuit:

<table>
<thead>
<tr>
<th>Resolution PPR</th>
<th>Power supply VDC</th>
<th>Output circuit</th>
<th>Light reserve warning</th>
<th>Order Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>max. 64</td>
<td>4.75 - 5.5</td>
<td>TTL, RS422 comp., inv.</td>
<td>-</td>
<td>M05</td>
</tr>
<tr>
<td>max. 1024</td>
<td>5 - 30</td>
<td>TTL inverted</td>
<td>-</td>
<td>M30</td>
</tr>
<tr>
<td>max. 64</td>
<td>10 - 30</td>
<td>TTL inverted</td>
<td>-</td>
<td>M24</td>
</tr>
</tbody>
</table>

Electrical connections:

- TTL - N05
- TTL inverted - N30
- TTL inverted - M24
- TTL inverted - M30

Further information at: www.wachendorff-prozesstechnik.de/c48c

Compact preset counter and tachometer CUB5
- 8 digit display
- 36 mm x 72 mm
- display of position, rotation-speed, flow-rate
- optional relais output cards

Further information at: www.wachendorff-prozesstechnik.de/cub5

Further industrial counters:
www.wachendorff-prozesstechnik.de/emg