

ERG gateway for RDM position transducer



- Interface converter 1 Vpp - HTL/RS-422
- PROFIBUS interface
- No programming required
- Diagnostic features included



General electrical specification

| | |
|----------------------------|--------------|
| Supply voltage ERG Gateway | 9-30 Vdc |
| Power consumption | 5W (no load) |

1Vpp Input Interface

| | |
|--|--------------------------------|
| Supply voltage to encoder | 5 Vdc (Powered by ERG gateway) |
| Signal type from encoder | 1 Vpp differential incremental |
| Signal period from encoder | 20 μ m |
| Resolution | |
| 5 fold interpolation | 4 μ m |
| 10 fold interpolation | 2 μ m |
| Reference signals | Single reference mark |
| Number of channels | 2 |
| Cable length between encoder and gateway | 150m (Max) |

Digital Output Interface

| | |
|-------------------------------------|---|
| Max. response speed | 12 m/min at 50 kHz |
| Quantization error, at steady state | |
| 5 fold interpolation | 22° |
| 10 fold interpolation | 11° |
| Permissible load | 40 mA (Max) |
| Signal levels | HTL or RS422 implemented via Line drivers |
| Number of channels | 6 channels: S00, S90, Sref, S00 inv, S90 inv and Sref inv |
| Cable length (Max) | HTL 200m @ 50kHz RS-422 500m |

PROFIBUS Interface

| | |
|---|------------------------------------|
| Baudrate | 9.6 kb/s – 12 Mb/s |
| Cable length | 400 m @ 1,5 Mb/s, 100 m at 12 Mb/s |
| Isolation of PROFIBUS interface | 1kVdc |
| Address setting configurable via switches | 3 DIP-switches (Address 0-126) |
| Diagnostics by PROFIBUS | Alarms |
| | Error counter value |
| | Alarm buffer |
| | Operating time |
| | Gateway firmware version |

2022-11-25 Specifications can be changed without prior notice

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For comprehensive explanation of the PROFIBUS parameters advise the user manual.

Status Outputs

| | |
|------------------|--|
| Signal level | 2 individual outputs via opto-couplers |
| Permissible load | 20 mA (Max) |
| Isolation | 1kVdc |
| Alarm types | Encoder or gateway error |
| | Counting error against reference signal |
| | Input signal state transition error |
| | Input 1 Vpp <200 mV |
| | Velocity alarm |
| | Gateway internal communication |
| | Power supply alarm |
| | 1Vpp amplitude alarm, level set by user (default 500 mV) |

Reset Input

| | |
|------------------|---------------------------------------|
| Signal level | 2 individual inputs via opto-couplers |
| Permissible load | 20 mA (Max) |
| Isolation | 1kVdc |

Mechanical specification

| | |
|--------------------------------------|---|
| Housing | Aluminium |
| Mounting | DIN rail 15 mm or chassis |
| Operating temperature | - 40°C ... +80°C |
| Storage temperature | - 40°C ... +80°C |
| Ingress protection class [IEC 60529] | IP 67 |
| Vibration [IEC 60068-2-64] | ≤ 300 m/s ² , 55 Hz – 2000 Hz) |
| Shock [IEC 60068-2-27] | ≤ 2000 m/s ² , 11 ms |

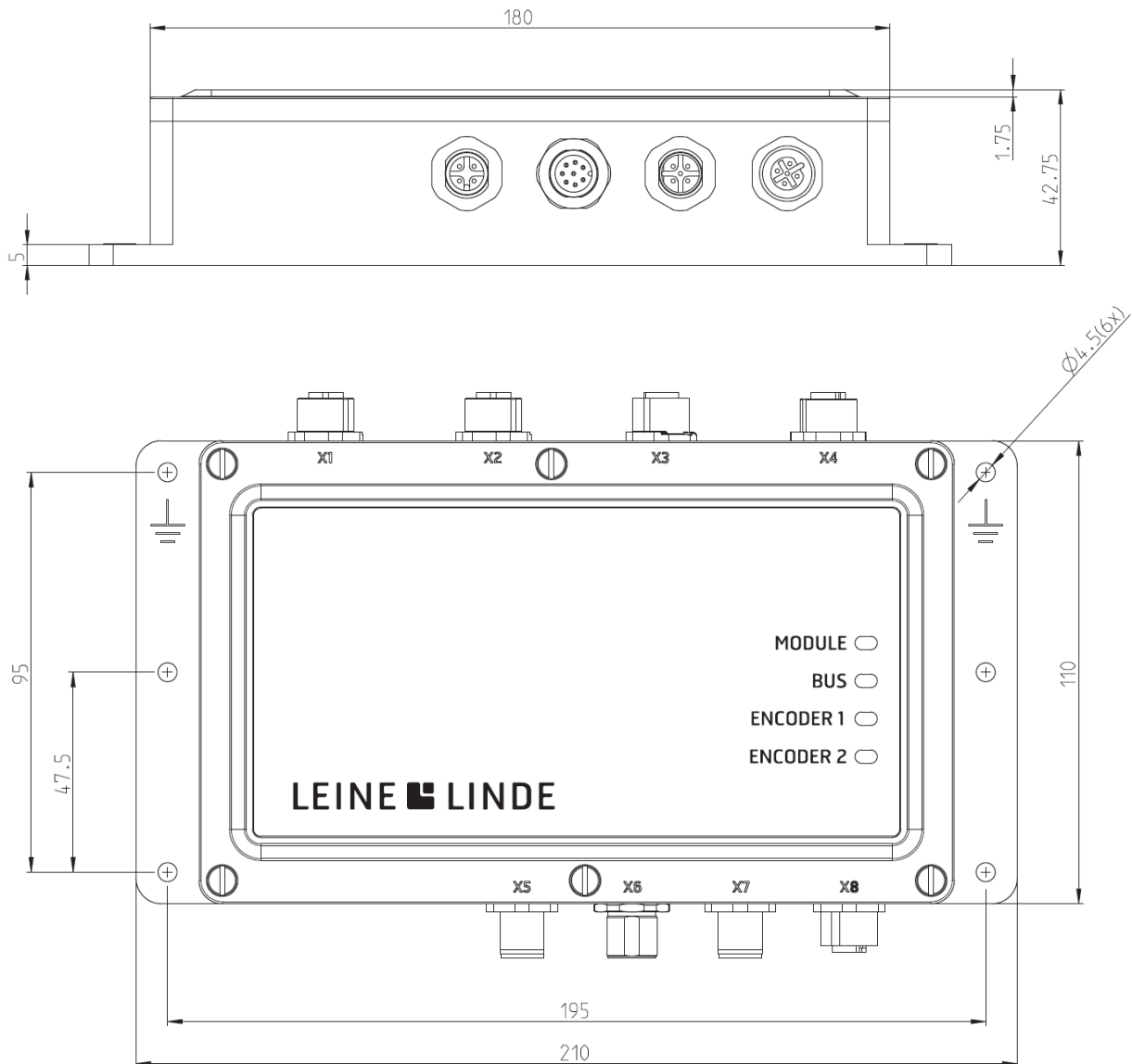
Accessories

| Part number | Description | Cable length |
|-------------|--------------------------------------|--------------|
| 817017-01 | RDM ML 60 position transducer | - |
| 896418-01 | RDM ML 130 position transducer | - |
| 816003-01 | Encoder interface cable RDM (robust) | 3 m |
| 816003-02 | Encoder interface cable RDM (robust) | 8 m |
| 767875-01 | Junction box cable | 20 m |
| 825017-01 | Connecting cable | 150 m |
| 767877-01 | Encoder input cables | 5 m |
| 532335-01 | Encoder output cable | 5 m |
| 586238-04 | Status output and reset input cable | 5 m |
| 586238-01 | Power supply cable | 5 m |
| 586287-01 | PROFIBUS in connector | - |
| 586281-01 | PROFIBUS out connector | - |

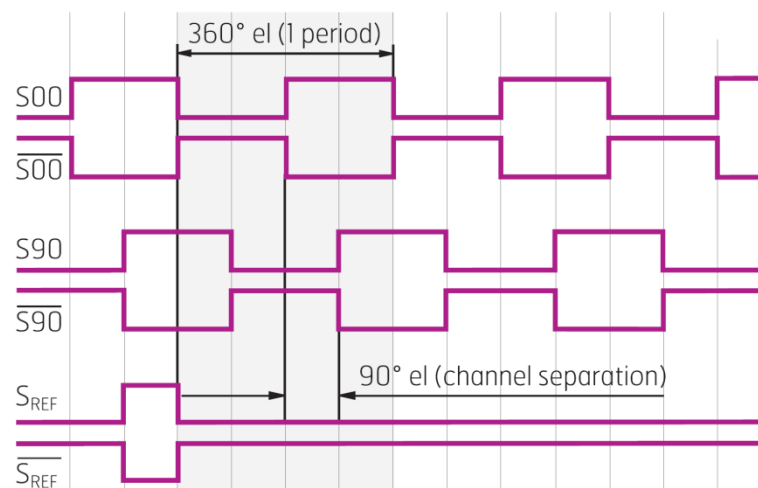
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Mechanical drawing



Output signals



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Ordering information

| Part number | Description |
|-------------|--|
| 823432-01 | ERG gateway with HTL output for RDM position transducer |
| 823433-01 | ERG gateway with RS-422 output for RDM position transducer |