# DKFU31474

## Signal Converter Frequency-to-Analogue and Frequency-to-Serial


- Input frequency range from 0.1 Hz to 1 MHz for full scale analogue output
- Conversion time only 1 msec. (f > 3 kHz)
- Analogue outputs +/- 10 V, 0 - 20 mA and 4 - 20 mA
- Polarity of analogue signal changes with change of the direction of rotation
- Suitable for conversion of quadrature signals (A/B) as well as single-channel signals, with all HTL or TTL or RS422 formats and levels
- Suitable for conversion of the sum, the difference or the ratio of two frequencies
- RS 232 and RS 485 interfaces for serial readout of the input frequencies
- Programmable digital filters and programmable linearisation curves
- Easy to set up by simple TEACH procedure, or by PC operator software

MEYER INDUSTRIE-ELECTRONIC GMBH
Systeme und Komponenten für die Automatisierungstechnik
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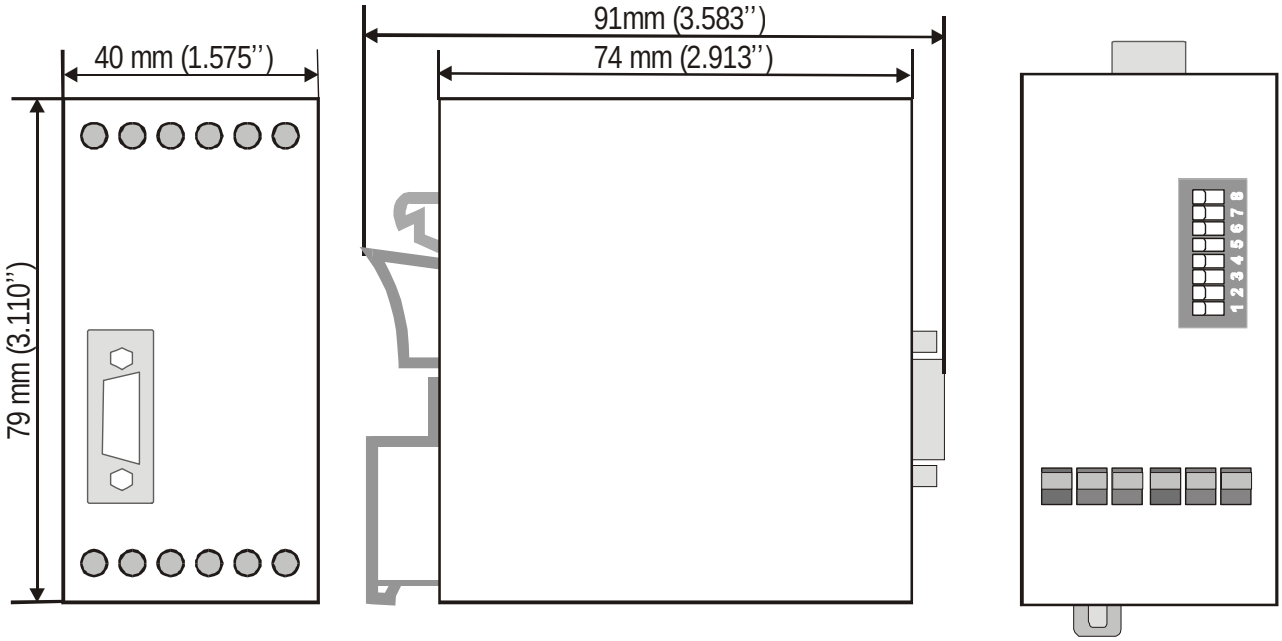
# 1. Dimensions




Front view | Side view | Top view

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# 2. Specifications

| | | |
|---|---|---|
| Power supply | : | 18...30 V DC |
| Current consumption | : | about 85 mA with 18 V, about 60 mA with 30 V (aux. output unloaded) |
| Aux. encoder supply | : | +5.5V +/- 5% (max.: 250mA) |
| Inputs (RS422/TTL differential) | : | RS422 compatible (differential level min. 1 V) or TTL differential, $f_{max}$ = 1 MHz |
| Inputs TTL single-ended | : | LOW < 0.5V, HIGH > 2.5V, $f_{max}$ = 200 kHz |
| Inputs HTL single-ended | : | LOW < 3V, HIGH > 10V, $f_{max}$ = 200 kHz, (Ri=4,75 kOhms) |
| Input „Control“ | : | LOW < 3V, HIGH > 10V, min. pulse duration 5 msec. |
| Analogue outputs | : | +/- 10V (external load > 5 kOhms)<br>0-20 mA / 4-20 mA (load < 270 Ohms)<br>Accuracy +/-0.1% |
| Step width of analogue signals | : | 1.25mV / 2.5uA |
| Analogue resolution | : | 14 bits (+10V / +20mA respectively -10V/ -20mA) |
| Accuracy of frequency measurement | : | 0.02 % +/- 1 digit |
| Response time of the analogue output in normal operation | : | approx. 1 msec (fin > 10 kHz); 1/fin (fin < 1 kHz) (depending on Sampling Time and frequency) |
| Zero reset time of analogue signal with sudden input interruption | : | 5 msec (filter off), 700 msec. (max. filtering) |
| Temperature range | : | Operation: 0° ... +45°C (+32 ... +113°F)<br>Storage: -25° ... +70°C (-13 ... +158 °F) |
| Weight | : | approx. 190 g |
| Conformity and standards | : | EMC 2004/108/EC: EN 61000-6-2<br>EN 61000-6-3 |