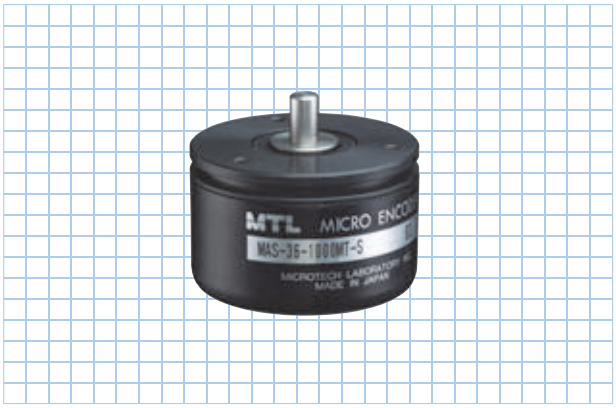
# MAS-36-MT series

[Electronic multi-revolution absolute encoder]

- Outside dimensions $\phi$46×30mm
- Resolution: 1000×256



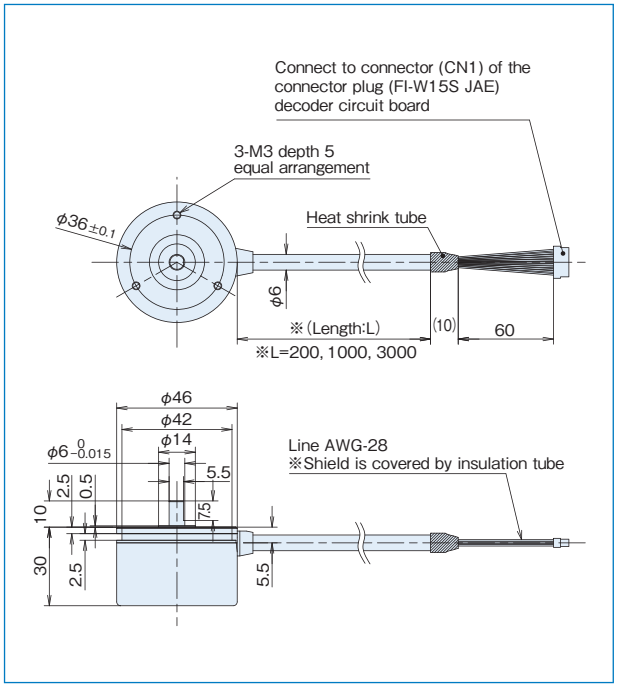

## Specifications

| Item \ Type name | | MAS-36-1000MT-S |
|---|---|---|
| Supply voltage | | DC5V ±5%, ripple (p-p) 5% or less |
| Current consumption | | 100mA or less (under no load) |
| Resolution | | Single-revolution part 1,000 divisions/ Multi-revolution part -128 to 127 revolutions Allowable shaft rotation angle when power supply is cut off ±80° |
| Alarm output | | Counter overflow output |
| Output | | Serial output (pure binary code, Positive logic) |
| Output circuit | | Line driver output (RS485 compliant) |
| Response speed | | 25kHz (1500rpm) |
| Allowable load of shaft (electrical) | Radial | 19.6N (2kg) |
| | Thrust | 9.8N (1kg) |
| Working temperature/ humidity | | −10°C～+70°C／RH35%～90% |
| Vibration resistance | | Durability 55Hz, double amplitude 1.5mm 2 hours each in X, Y, and Z directions |
| Impact resistance | | Durability 500m/s$^2$ (about 50G) 3 times each in X, Y, and Z directions |
| Cable | | Outside diameter $\phi$6 16-core conector Insulated shield cable AWG28 (length 200mm) |
| Mass | | 300g or less |

## Decoder specifications (60×60 PCB)

| Item \ Type name | MA-36-MT-DECODER |
|---|---|
| Supply voltage | DC12V −10%～24V +15% |
| Current consumption | 150mA or less (including encoder, stepless output load) |
| Output | Single-revolution absolute parallel data (ABS 0-9) Multi-revolution absolute parallel data (TKN 0-7) Counter overflow alarm (COF) |
| Absolute data output code | Pure binary code, Negative logic (H=0、L=1) |
| Input | Single-revolution absolute data reset input (ARST) Multi-revolution absolute data reset input (TRST) (100ms or less, 1mA or less) |
| Absolute signal update cycle | 3$\mu$s typ. (333kHz) |
| Output circuit | NPN open collector output |
| Output capacity | Sink current 20mA or less Load voltage 30V or less Residual voltage 0.4V or less |
| Connection | Outside diameter $\phi$6 16-core vinyl wire Insulated shield cable (length 1.5m) |

## Outside dimensions




## Decoder Outside dimensions (Option)