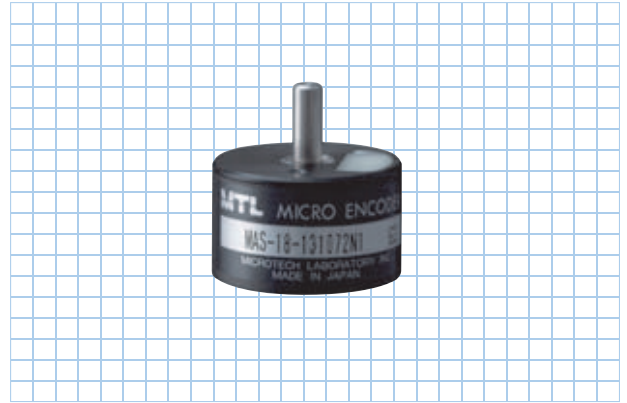


# MAS-18 series

[Absolute]

- Outside dimension:  $\phi 25\text{mm} \times 15\text{mm}$
- Resolution: 18bit, SSI interface



## Encoder specifications

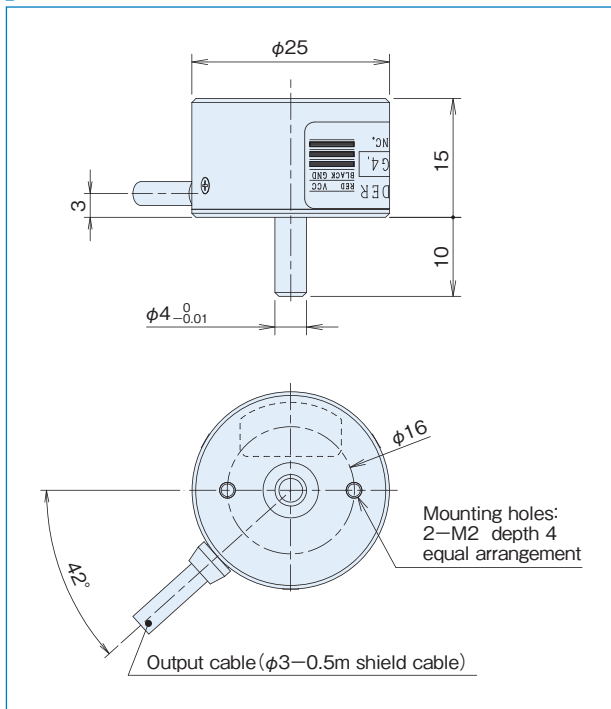
Item	Type name	MAS-18-□□N1
Supply voltage		DC5V $\pm 5\%$
Current consumption		100mA or less (under no load)
Resolution		32,768 (15bit), 65,536 (16bit) 131,072 (17bit), 262,144 (18bit)
Allowable revolutions		6000r/min
Allowable load of shaft (electrical)	Radial	1.9N (200gf)
	Thrust	1.9N (200gf)
Working temperature/humidity		$-10^{\circ}\text{C} \sim +70^{\circ}\text{C} / \text{RH}35\% \sim 90\%$
Storage temperature		$-20^{\circ}\text{C} \sim +80^{\circ}\text{C}$
Vibration resistance		Durability 55Hz, double amplitude 1.5mm 2 hours each in X, Y, and Z directions
Impact resistance		Durability $500\text{m/s}^2$ (about 50G) 3 times each in X, Y, and Z directions
Cable		Outside diameter $\phi 3$ —8-core vinyl wire Insulated shield cable AWG30 (length 0.5m)
Data formats		RS422 SSI Point To Point
Mass		30g

## Decoder Specifications (■37×37 PCB)

Item	Type name	DECODER-△△bit
Supply voltage		DC5V $\pm 5\%$
Current consumption		60mA or less (160mA or less including encoder)
Parallel data update cycle		$60\mu\text{s}$ (16.7kHz)
Output circuit		NPN open collector output (when using parallel output)
Output capacity		Sink current 20mA max. Load voltage 35Vmax. Residual voltage 0.4V or less
Logic		Negative logic (H=0, L=1)
Connection		Power supply and parallel signal output by P=2.54 header pins (see diagram below)

△△...15, 16, 17, 18 (corresponding to the encoder resolution)

## Encoder outside dimensions



## Decoder Outside dimensions (Option)

