

ISA 2320 – Incremental optical scale of small overall dimensions

- Reduced size, to allow installation on small machine-tools or for applications with limited installation space.
- Possibility of registration which simplifies alignment and makes use on rough surfaces easy (retrofitting and machines for which application was not foreseen).
- Resolutions up to 0.5 μm . Accuracy $\pm 3 \mu\text{m}$ or $\pm 10 \mu\text{m}$.
- Linear thermal expansion coefficient $\lambda = 10.6 \times 10^{-6} \text{ }^\circ\text{C}^{-1}$ suitable to the application.
- Reference indexes in required positions.
- Protected against inversion of power supply polarity and short circuit on output ports.

ISA 10

Resolution 100 μm

| | |
|-----------------------|------------------------------------|
| Resolution | 100 μm |
| Grating pitch | 400 μm |
| Accuracy | $\pm 10 \mu\text{m}$ |
| Max. traversing speed | 120 m/min |
| Reference indexes | in required positions |
| Output | NPN / LINE DRIVER / PUSH-PULL |
| Protection class | IP 54 standard - IP 64 pressurized |

ISA 100

Resolution 10 μm

| | |
|-----------------------|------------------------------------|
| Resolution | 10 μm |
| Grating pitch | 40 μm |
| Accuracy | $\pm 5 \mu\text{m}$ |
| Max. traversing speed | 80 m/min |
| Reference indexes | in required positions |
| Output | NPN / LINE DRIVER / PUSH-PULL |
| Protection class | IP 54 standard - IP 64 pressurized |

ISA 5

Resolution 5 μm

| | |
|-----------------------|------------------------------------|
| Resolution | 5 μm |
| Grating pitch | 20 μm |
| Accuracy | $\pm 3 \mu\text{m}$ |
| Max. traversing speed | 60 m/min |
| Reference indexes | in required positions |
| Output | NPN / LINE DRIVER / PUSH-PULL |
| Protection class | IP 54 standard - IP 64 pressurized |

ISA W1

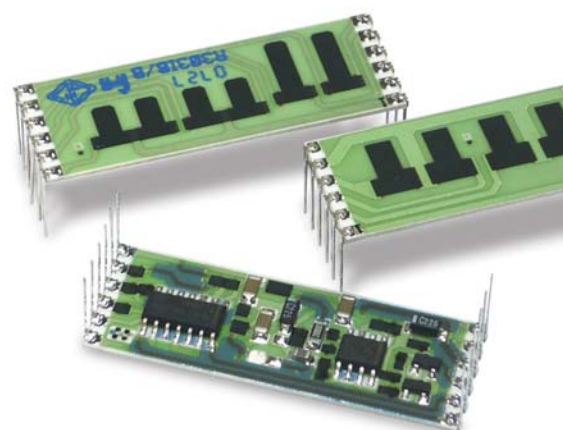
Resolution 1 μm

| | |
|-----------------------|------------------------------------|
| Resolution | 1 μm |
| Grating pitch | 40 μm |
| Accuracy | $\pm 3 \mu\text{m}$ |
| Max. traversing speed | 25 m/min |
| Reference indexes | in required positions |
| Output | NPN / LINE DRIVER / PUSH-PULL |
| Protection class | IP 54 standard - IP 64 pressurized |

ISA W05

Resolution 0.5 μm

| | |
|-----------------------|------------------------------------|
| Resolution | 0.5 μm |
| Grating pitch | 20 μm |
| Accuracy | $\pm 3 \mu\text{m}$ |
| Max. traversing speed | 12 m/min |
| Reference indexes | in required positions |
| Output | NPN / LINE DRIVER / PUSH-PULL |
| Protection class | IP 54 standard - IP 64 pressurized |



Hybrid ceramic circuit calibrated by laser for generation of signals. Any vibration or thermal variation does not affect the circuit stability.