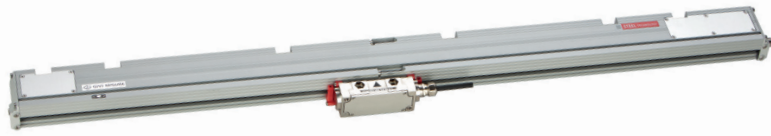


code **ST02** | project **A73** | release **A**

DRIVE-CLiQ

GENERAL FEATURES

- Absolute optical scale, available in a single piece or in modular version for large machines (up to 30040 mm of measuring length).
- Application in various industrial fields such as machine tools, vertical lathes, gantry machines, laser/plasma cutting machines, robotics, automation, etc.
- Stainless steel grating, integral with the machine guide, for an excellent accuracy at any temperature.
- DRIVE-CLiQ interface, for a direct connection to Siemens CNCs.
- Resolutions up to 0.1 μm . Accuracy grade $\pm 5 \mu\text{m}$.
- Rigidly bound modules, for a perfect seal against liquids and environmental dirt, unaltered over time.
- Wide alignment tolerances.
- Pressurization from both sides of the scale and/or of the transducer.

Cod. GVS 908

D

Measuring support	stainless steel grating
- Grating pitch	240 μm
- Linear thermal expansion coefficient	10.6 x 10 ⁻⁶ °C ⁻¹
Serial interface	Siemens DRIVE-CLiQ
Resolution absolute measure	1 - 0.1 μm
Accuracy grade	$\pm 5 \mu\text{m}^*$
Measuring length ML in mm	from 640 mm to 30040 mm, with steps of 200 mm Modules length: 1200, 1400, 1600, 1800, 2000 mm
Max. traversing speed	120 m/min
Max. acceleration	30 m/s ²
Required moving force	$\leq 15 \text{ N}$
Vibration resistance (EN 60068-2-6)	$\leq 100 \text{ m/s}^2$ [55 ÷ 2000 Hz]
Shock resistance (EN 60068-2-27)	$\leq 300 \text{ m/s}^2$ [11 ms]
Protection class (EN 60529)	IP 53 standard IP 64 pressurized
Operating temperature	0 °C ÷ 50 °C
Storage temperature	-20 °C ÷ 70 °C
Relative humidity	20% ÷ 80% (not condensed)
Reading block sliding	by ball bearings @
Connector	male M12 8 pins
Electrical protections	inversion of polarity and short circuits
Weight	1.7 kg + 3.5 kg/m

* The declared accuracy grade of $\pm X \mu\text{m}$ is referred to a measuring length of 1 m.

MECHANICAL CHARACTERISTICS

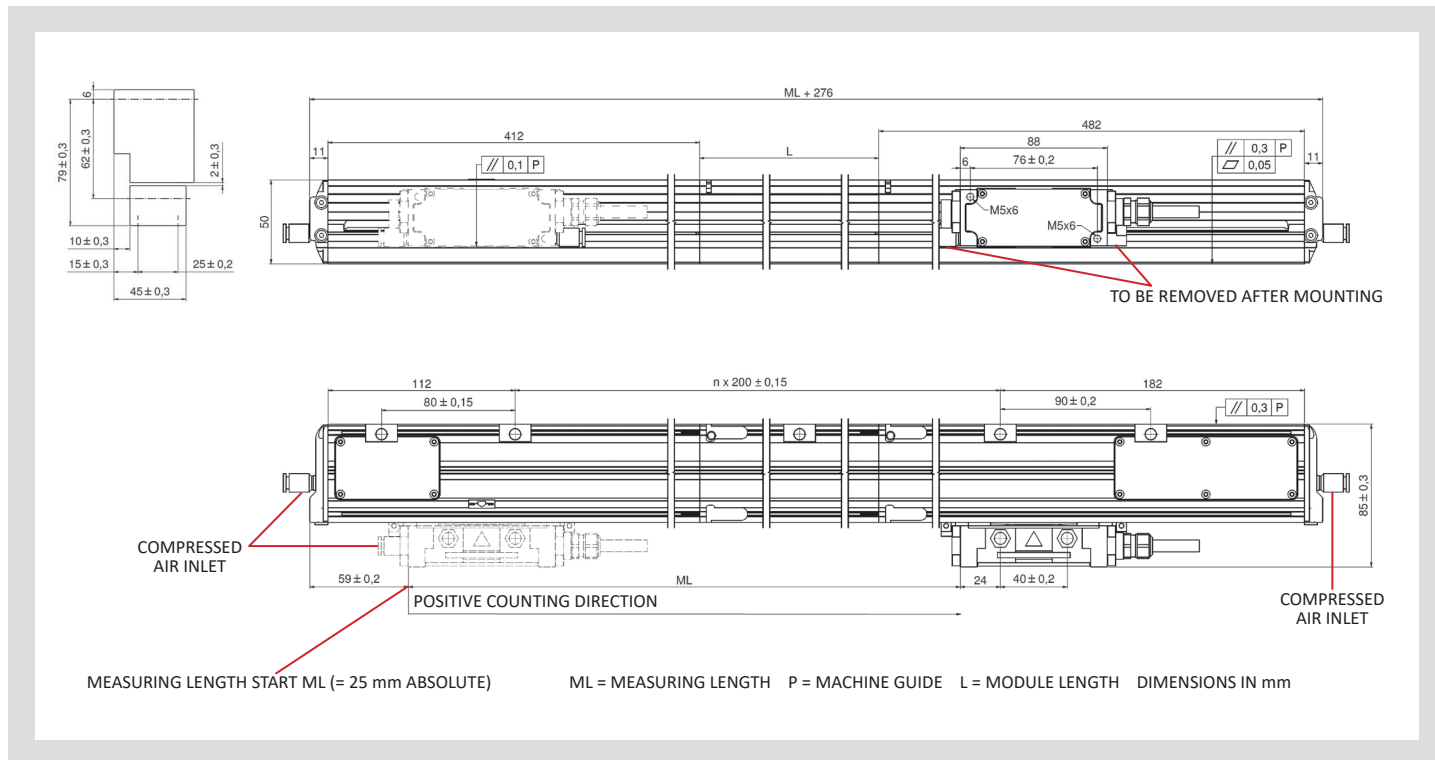
- Rugged and heavy **PROFILE** made of anodized aluminum. Dimensions 50x58.5 mm.
- **SPRING SYSTEM** for misalignment compensation and self-correction of mechanical hysteresis.
- Non-extendible **SEALING LIPS** along the sliding side of the reader head, fixed at the lateral ends.
- Pressurizable **READER HEAD**, consisting of tie rod and reading block, with fully-protected place for electronic boards.
- **READING BLOCK** sliding through ball bearings.
- Die-cast **TIE ROD**, with nickel surface treatment.
- Absolute stainless steel **GRATING**, protected by the scale housing.
- **GASKETS** between modules for a full protection in mechanical joints.
- **FULL POSSIBILITY** to disassemble and reassemble it.
- Possibility of direct **SERVICE**.

ELECTRICAL CHARACTERISTICS

- Reading devices with light emitter and an array of receiving photodiodes.
- Serial protocol Siemens DRIVE-CLiQ.
- Electrical protection against polarity inversion and short circuits on output ports.
- **CABLE:**
 - PUR external sheath
 - standard length 0.5 m
 - male connector M12 8 pins

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DIMENSIONS



ORDERING CODE

Example OPTICAL SCALE **GVS 908 D1A 03240 V D1 M05/S PR**

Model	Scale type, resolution	Measuring length	Power supply	Output signals	Cable length, cable type	Special, pressurization
GVS 908	D1 = 1 μ m D01 = 0.1 μ m A = absolute	Measuring length in mm 03240 = ML 30040 = ML _{MAX}	V	D1 = DRIVE-CLiQ	Mnn = length in m M05 = 0.5 m S = PUR cable	No cod. = standard SPnn = special nn PR = pressurized

Without prior notice, the products may be subject to modifications that the Manufacturer reserves to introduce as deemed necessary for their improvement.